60001097

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-216-98
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 receipt; handwritten notes; downhole camera images 22p. 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: DP 5/13/08
Initials Date

DB: mah
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

D-216-98

60001097 4010

6000 1097

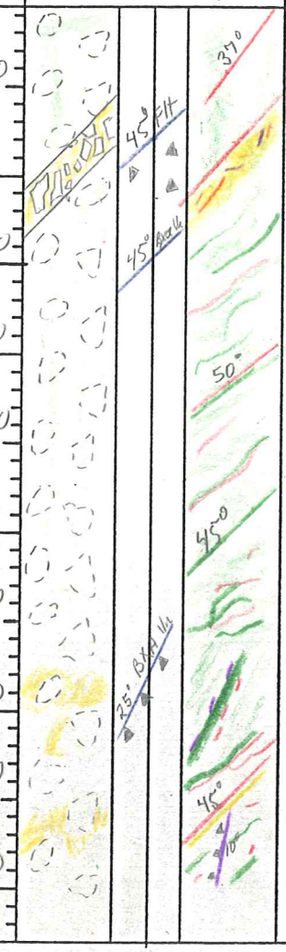
Hecla MINING COMPANY

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

ROSEBUD PROJECT
DIAMOND DRILL LOG

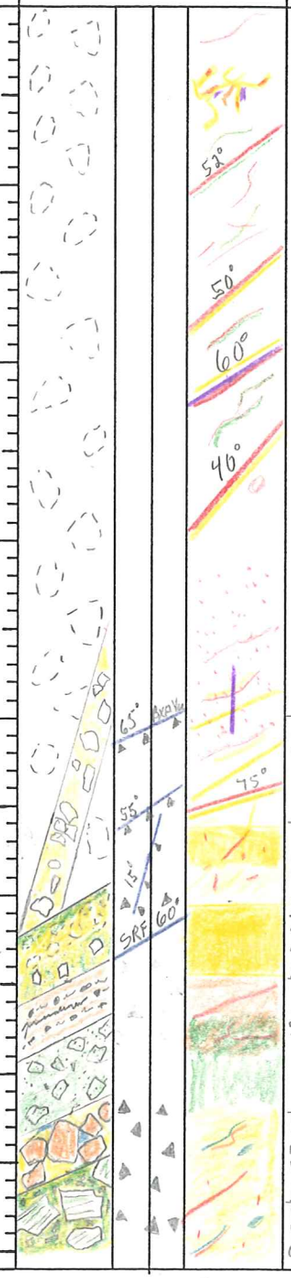
HOLE NUMBER	D-216-98	LOCATION	East Zone Stope 42 Sec. 1500
PAGE 1 OF 3		NORTHING	
DATE	5/18/98	EASTING	
LOGGED BY	Brian W. Morris	ELEVATION	
SCALE	1" = 10'	AZIMUTH	N54W
TOTAL DEPTH	141'	INCLINATION	+61°

REMARKS

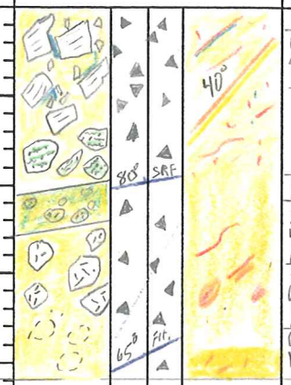
LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	0 - 50' Autobrecciated Dozer Lt gry fg equigranular subrounded monolithic clast "ghosts" supported by Lt gry fg equigranular mtx.	5.0, 10.0, 15.0, 20.0, 25.0, 30.0, 35.0, 40.0, 45.0, 50.0		8.5-11.5 Mosaic-Rubble BXA: Clast supported subangular Monolithic Dozer Clasts healed by gry-gry gr SiO_2 37.6-38.6 Rubble BXA Vn: subangular Dozer Clasts healed by SiO_2 + gr clay, Minor Bladed marc & barite Filled Vugs.	0-8.5' wk-Mod gr clay alt wk-Mod Sulf Vnlets 8.5-11.5 Mod-Str leaching of SiO_2 MTX, Minor druzy, Qt lining, Wk barite + bladed marc vug fillings. 11.5-16.0 Mod gr clay Vn, wk marc + gr clay + wh clay Vn, minor .2-.3' wide rubble BXA Vn. 16.0-37.6 Mod gr clay subparallel Vn, wk gr clay + marc Vns, wk perv. gr clay alt. 38.6-51.0 Mod-Str gr clay Vn ± Bladed Marc, Minor SiO_2 Bladed Marc, locally Str Silic of Auto bxa MTX, Minor Vuggy barite healed bxa Vn ± wh Clay

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag
0	5.0					
5.0	8.5					
8.5	11.5					
11.5	16.0					
16.0	21.0					
21.0	26.0					
26.0	31.0					
31.0	36.0					
36.0	37.6					
37.6	38.6					
38.6	41.0					
41.0	46.0					
46.0	51.0					

HOLE NUMBER D-216-98 PAGE 2 OF 3

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
	Reduced	50- Autobrecciated Dozer Lt gry Fg equigranular monolithic subrounded clast 'ghosts' supported by Lt gry Fg equigranular Mtx.	55 60 65 70 75 80 85 90 95 100 105 110 115 120			51.0 - 56.5 Mod gry SiO_2 ± Marc Vn & Stk wk, Minor barite Vug filling, R wh Clay, wk gr clay Vnlets, Minor gry SiO_2 + Rx flour healed Bxa Vn. 56.5 - 70.5 : Wk ± SiO_2 ± Marc Vn & Vnlets, wk gr clay Vn, wk - Mod blch & argil. 70.5 - 81.0 Mod .5-1cm Wide Bladed Marc + barite + SiO_2 ± wh Clay, Wk gr clay + Sulf Vnlets, Wk blch + argil. 81.0 - 86.5 Wk SiO_2 + Marc Vn, Wk Sulf Vnlets. 86.5 - 91.0 Str fg diss Sulf, Wk sulf Vnlets 91 - 93.5 Str 1cm wide bladed Marc + SiO_2 Vn, One 4cm wide massive barite Vn. 93.5 - 96.0 .3' wide gry SiO_2 healed rubble bxa Vn, Mod SiO_2 + Marc Vn, Str yell gr staining of Clast ghosts. 102.8 - 104.7 wk diss sulf patches 108 - 112.5 Mod gr clay alt, Mod argil, Wk Sulf Vnlets, Mod $CaCO_3$ + SiO_2 + Marc Vn. 112.5 - 115.9 wk diss Marc/py in Mtx. 115.9 - 120 Wk $CaCO_3$ + Marc Vn, Wk diss Marc.	76.0 51.0 56.5 61.0 66.0 70.5 76.0 81.0 86.5 91.0 93.5 96.0 98.0 101.0 102.8 104.7 108.0 112.5 115.9	51.0 56.5 61.0 66.0 70.5 76.0 81.0 86.5 91.0 93.5 96.0 98.0 101.0 102.8 104.7 108.0 112.5 115.9 120.0				
		Note: An addition error was made in core footage block. 3' was drilled from 101' → 104'. 104' block was marked 103'. I changed to correct Footage interval & all other blocks to bottom of hole.										
		101.9' Lower South Ridge Fault Plane 101 - 101.9 Gr - Gry SiO_2 flooded Milled bxa w/ faint br & gr round clast 'ghosts'. 101.9 Fault plane deleniated by gr & wh banded SiO_2 Vn 2cm Wide. 101.9 - 102.8 Gry SiO_2 flooded Milled bxa w/ gr & Tan rounded clast 'ghosts'. 102.8 - 104.7' LBT - Pinkish Tan - Tan fg Autobrecciated Clasts. 104.7' - 108.0' LBT - Leopard Skin Textr. fg Br Spots & Thick wavey bands & wh blched + argil. 108 - 112.5 LBT - Gr - Br fg equigranular monolithic Bxa Tuff 112.5 - 115.9 Vitrophyre Br w/ wh devitrophication spots grading - wh fg equigranular str clay alt. 115.9 - 127.0 LBT Planner Laminated Br - gr fg w/ fine lamina deleniated by hairline dk br lines			91 - 93.5 Localized gry SiO_2 healed crackle BXA & Shears. 96.0 - 98.0 Clast supported rubble Bxa — Mtx supported milled Bxa healed by gry SiO_2, wk diss Marc & vnlets 98.0 - 101' Str gry SiO_2 healed Shears + milled bxa Vns, str dk gry SiO_2 Vn. 102.8 - 104.7 Rubble BXA: Mtx supported LBT fg Autobxa angular clasts healed by gr SiO_2 112.5 - 115.9' Mosaic BXA: Clast supported, monolithic, angular Vitro. Clasts healed by gry wh SiO_2 ± $CaCO_3$ Mtx. 115.9 - 120' Rubble BXA: Monolith. Planner lam angular clasts healed by gr SiO_2 + Rx flour + Small micro clasts.						

HOLE NUMBER D-216-98 PAGE 3 OF 3

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	127.0'~129.7' LBT Lepord Skin Texture 129.7-137.2' Fine Grain Porphyry Tan~Br Fg groundmass w/wk-Mod fg~Mg wh feld: laths.	125 130 135 140		120-127 Clast Supported Rubble BXA: Planner Lam. angular clasts healed by gr SiO_2 + mkMO Clasts. 129.7 Upper SRF Plane 127.7-132.4 Milled Bxa: Gr SiO_2 Flooded w/ Gr rounded Volcaniclastic clast "ghosts" 132.4~137.2 Rubble Bxa: fg porph subrounded Clasts healed by gry SiO_2 Mtx. 137.2~140.0 Milled Bxa: Gr-Gry rounded Qtzn clasts healed by gr SiO_2, Mod wh Clay filled Vugs.	120-127 Mod bleached Marc + SiO_2 Vn± $CaCO_3$, Metallic Marc. 132.4-137.2 Mod leaching w/ Stibnite + wk wh Clay Coating. 136.7-137.2 Mod gr Clay alt of Clasts.

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
120.0	124.0				
124.0	127.0				
127.0	129.7				
129.7	132.4				
132.4	136.0				
136.0	137.2				
137.2	141.0				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-216-98 DATE: 5/18/98 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)
0.0	2.0	90	90	0										
2.0	7.0	92	92	70										
7.0	11.0	83	83	58										
11.0	16.0	90	90	62										
16.0	21.0	94	94	13										
21.0	26.0	98	98	0										
26.0	31.0	90	90	20										
31.0	41.0	86	86	93										
41.0	46.0	88	88	23										
46.0	51.0	90	90	44										
51.0	56.0	98	98	51										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-216-98 DATE: 5/18/98 LOGGED BY: Brian W. Morris 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)
56	61	96	96	48										
61	66	96	96	31										
66.0	71.0	100	100	48										
71.0	76.0	100	100	62										
76.0	81.0	96	96	67										
81.0	86.0	96	96	75										
86.0	91.0	84	84	0										
91.0	96.0	96	96	0										
96.0	101.0	96	96	33										
101.0	104.0	90	90	67										
104.0	108.0	85	85	29										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-216-98 DATE: 5/18/98 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 C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
108.0	108.5	100	100	0										
108.5	113.5	94	94	55										
113.5	114.0	100	100	0										
114.0	119.0	98	98	86										
119.0	124.0	90	90	67										
124.0	129.0	94	94	81										
129.0	134.0	90	90	50										
134.0	136.0	100	100	90										
136.0	141.0	80	80	48										

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 0048928-IN
INVOICE DATE: 06/05/98

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-216-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
39	SAMPLES RECEIVED	.00	.00
38	JAW CRUSHING CHARGE	1.30	49.40
38	COARSE MILLING CHARGE	4.50	171.00
38	SPLITTING CHARGE	2.40	91.20
38	RING MILLING CHARGE	2.00	76.00
39	Au (1 A.T. FIRE ASSAY)	8.00	312.00
11	Au ANALYSES/GRAVIMETRIC	8.75	96.25
39	HYDROCHLORIC/NITRIC DIGESTION	2.00	78.00
39	Ag ANALYSES	1.00	39.00

86-5110-477
FDA

NET INVOICE:	912.85
LESS DISCOUNT:	182.57
FREIGHT:	.00
INVOICE TOTAL:	730.28

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048928

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-216-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 39 REPORTED : 4 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 SP048928

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-216-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-216-98 0-5	0.013			0.06
D-216-98 5.0-8.5	0.005			0.05
D-216-98 8.5-11.5	0.009			0.03
D-216-98 11.5-16.0	0.004			0.03
D-216-98 16-21	0.003			0.03
D-216-98 21-26	0.005			0.03
D-216-98 26-31	0.007			0.05
D-216-98 31-36	0.002	0.003		0.02
D-216-98 36.0-37.6	0.001			<0.02
D-216-98 37.6-38.6	0.004			0.02
D-216-98 38.6-41.0	0.005			0.03
D-216-98 41-46	0.007			0.04
D-216-98 46-51	0.008	0.007		0.06
D-216-98 51.0-56.5	0.010			0.03
D-216-98 56.5-61.0	0.004			0.02
D-216-98 61-66	0.003			0.02
D-216-98 66.0-70.5	0.003			0.03
D-216-98 70.5-76.0	0.006			0.04
D-216-98 76-81	0.009			0.26
D-216-98 81.0-86.5	0.002			0.04
D-216-98 86.5-91.0	0.092		0.091	0.46
D-216-98 91.0-93.5	0.196	0.100	0.124	0.12
D-216-98 93.5-96.0	0.285	0.306	0.287	0.63
D-216-98 96-98	0.106		0.081	0.29
D-216-98 98-101	0.293		0.466	0.39

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048928

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-216-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-216-98 101.0-102.8	0.113		0.067	0.13
D-216-98 102.8-104.7	0.050		0.032	0.23
D-216-98 104.7-108.0	0.023			0.42
D-216-98 108.0-112.5	0.036			0.03
D-216-98 112.5-115.9	0.031			0.40
D-216-98 115.9-120.0	0.316	0.816	0.517	0.19
D-216-98 120-124	0.072		0.052	0.07
D-216-98 124-127	0.181		0.173	0.79
D-216-98 127.0-129.7	0.090		0.095	0.07
D-216-98 129.7-132.4	0.007			0.09
D-216-98 132.4-136.0	0.012			0.20
D-216-98 136.0-137.2	0.010			0.16
D-216-98 137.2-141.0	0.007			0.26
31063	0.153			2.91

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ANALYSIS REPORT SP048928

American Assay Laboratories

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

HECLA MINING COMPANY

COPIES TO : KURT ALLEN
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:
:

CLIENT REFERENCE No: D-216-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 39 REPORTED : 4 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 SP048928

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-216-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-216-98 0-5	0.013			0.06
D-216-98 5.0-8.5	0.005			0.05
D-216-98 8.5-11.5	0.009			0.03
D-216-98 11.5-16.0	0.004			0.03
D-216-98 16-21	0.003			0.03
D-216-98 21-26	0.005			0.03
D-216-98 26-31	0.007			0.05
D-216-98 31-36	0.002	0.003		0.02
D-216-98 36.0-37.6	0.001			<0.02
D-216-98 37.6-38.6	0.004			0.02
D-216-98 38.6-41.0	0.005			0.03
D-216-98 41-46	0.007			0.04
D-216-98 46-51	0.008	0.007		0.06
D-216-98 51.0-56.5	0.010			0.03
D-216-98 56.5-61.0	0.004			0.02
D-216-98 61-66	0.003			0.02
D-216-98 66.0-70.5	0.003			0.03
D-216-98 70.5-76.0	0.006			0.04
D-216-98 76-81	0.009			0.26
D-216-98 81.0-86.5	0.002			0.04
D-216-98 86.5-91.0	0.092		0.091	0.46
D-216-98 91.0-93.5	0.196	0.100	0.124	0.12
D-216-98 93.5-96.0	0.285	0.306	0.287	0.63
D-216-98 96-98	0.106		0.081	0.29
D-216-98 98-101	0.293		0.466	0.39

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048928

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-216-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-216-98 101.0-102.8	0.113		0.067	0.13
D-216-98 102.8-104.7	0.050		0.032	0.23
D-216-98 104.7-108.0	0.023			0.42
D-216-98 108.0-112.5	0.036			0.03
D-216-98 112.5-115.9	0.031			0.40
D-216-98 115.9-120.0	0.316	0.816	0.517	0.19
D-216-98 120-124	0.072		0.052	0.07
D-216-98 124-127	0.181		0.173	0.79
D-216-98 127.0-129.7	0.090		0.095	0.07
D-216-98 129.7-132.4	0.007			0.09
D-216-98 132.4-136.0	0.012			0.20
D-216-98 136.0-137.2	0.010			0.16
D-216-98 137.2-141.0	0.007			0.26
31063	0.153			2.91

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

Sparks Office
1500 Glendale Ave.
Nevada 89431
Box 11530
Reno, NV 89510
Telephone
(702) 356-0606
Fax
(702) 356-1413

Tucson Office
2775 E. Ganley
Tucson, AZ 85706
Telephone
(520) 294-8078
Fax
(520) 294-6352

Elko Office
2320 Last Chance Rd.
Nevada 89801
Box 2908
Elko, NV 89801
Telephone
(702) 738-9100
Fax
(702) 738-2594

Mazatlan Office
Telephone/Fax
011-52-69-170035

Other Offices
Lima, Peru
Santiago, Chile
Mendoza, Argentina

Company: Rosebud Mine

Address: P.O. Box 2610

City Winnemucca State NV Zip 89446

Telephone Number: (702) 623-6412 Fax Number: (702) 623-6967

Project Name: Development Purchase Order Number:

Date Submitted: 5/14/98 Number of Samples: 38

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

D-216-98 SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED
0-5.0	61.0-66.0	Core	115.9-120.0
5.0-8.5	66.0-70.5		120.0-124.0
8.5-11.5	70.5-76.0		124.0-127.0
11.5-16.0	76.0-81.0		127.0-129.7
16.0-21.0	81.0-86.5		129.7-132.4
21.0-26.0	86.5-91.0		132.4-136.0
26.0-31.0	91.0-93.5		136.0-137.2
31.0-36.0	93.5-96.0		137.2-141.0
36.0-37.6	96.0-98.0		
37.6-38.6	98.0-101.0		
38.6-41.0	101.0-102.8		
41.0-46.0	102.8-104.7		
46.0-51.0	104.7-108.0		
51.0-56.5	108.0-112.5		
56.5-61.0	112.5-115.9		

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 Rosebud Mine Protocol

CLIENT FILE COPY

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048928

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-216-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 39 REPORTED : 4 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

PROVISIONAL REPORT SP048928

CLIENT : ERCLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-216-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-216-98 0-5	0.013			0.06
D-216-98 5.0-8.5	0.005			0.05
D-216-98 8.5-11.5	0.009			0.03
D-216-98 11.5-16.0	0.004			0.03
D-216-98 16-21	0.003			0.03
D-216-98 21-26	0.005			0.03
D-216-98 26-31	0.007			0.05
D-216-98 31-36	0.002	0.003		0.02
D-216-98 36.0-37.6	0.001			<0.02
D-216-98 37.6-38.6	0.004			0.02
D-216-98 38.6-41.0	0.005			0.03
D-216-98 41-46	0.007			0.04
D-216-98 46-51	0.008	0.007		0.06
D-216-98 51.0-56.5	0.010			0.03
D-216-98 56.5-61.0	0.004			0.02
D-216-98 61-66	0.003			0.02
D-216-98 66.0-70.5	0.003			0.03
D-216-98 70.5-76.0	0.006			0.04
D-216-98 76-81	0.009			0.26
D-216-98 81.0-86.5	0.002			0.04 91-101 = 10'
D-216-98 86.5-91.0	0.092		0.091	0.46 @
D-216-98 91.0-93.5 2.5	0.196	0.100	0.124	0.12
D-216-98 93.5-96.0 2.5'	0.285	0.306	0.287	0.63 0.259 Ag
D-216-98 96-98 2	0.106		0.081	0.29 0.36 Ag
D-216-98 98-101 3	0.293		0.166	0.39

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AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048928

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-216-98

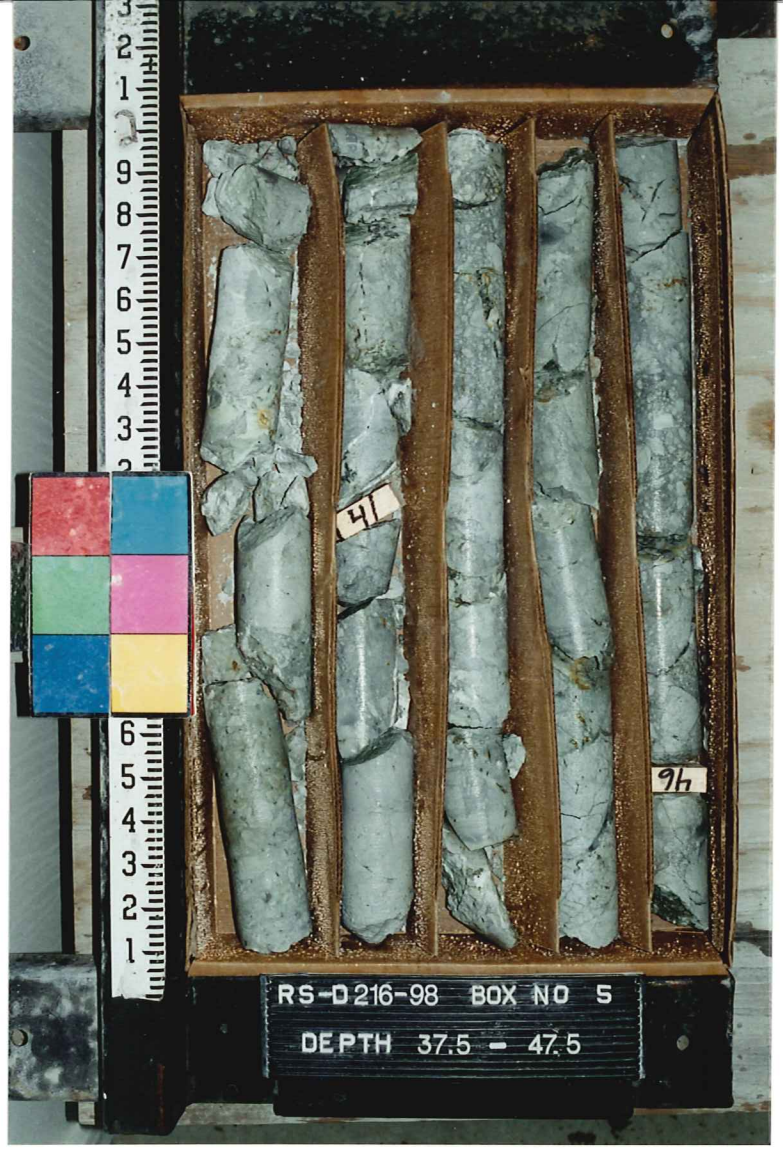
REPORTED : 4 JUN 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)	
D-216-98 101.0-102.8	0.113		0.067	0.13	
D-216-98 102.8-104.7	0.050		0.032	0.23	
D-216-98 104.7-108.0	0.023			0.42	
D-216-98 108.0-112.5	0.036			0.03	
D-216-98 112.5-115.9	0.031			0.40	115.9-127: 11.1' @
D-216-98 115.9-120.0 4.1	0.316	0.816	0.517	0.19	0.192 Au
D-216-98 120-124 4	0.072		0.052	0.07	0.31 Ag
D-216-98 124-127 3	0.181		0.173	0.79	
D-216-98 127.0-129.7	0.090		0.095	0.07	
D-216-98 129.7-132.4	0.007			0.09	
D-216-98 132.4-136.0	0.012			0.20	
D-216-98 136.0-137.2	0.010			0.16	
D-216-98 137.2-141.0	0.007			0.26	
31063	0.153			2.91	

RS-D216-98 BOX NO 2
DEPTH 9.5 - 19

RS-D216-98 BOX NO 1
DEPTH 0.0 - 9.5

RS-D216-98 BOX NO 3
DEPTH 19 - 28.5


RS-D216-98 BOX NO 5
DEPTH 37.5 - 47.5

RS-D216-98 BOX NO 4
DEPTH 28.5 - 37.5

RS-D216-98 BOX NO 6
DEPTH 47.5 - 57

RS-D216-98 BOX NO 8
DEPTH 66 - 75

RS-D216-98 BOX NO 7
DEPTH 57 - 66

RS-D216-98 BOX NO 9
DEPTH 75 - 84

96
101
RS-D 216-98 BOX NO 11
DEPTH 93.5 - 102.5

98
96
RS-D 216-98 BOX NO 10
DEPTH 84 - 93.5

103
101
107.5
112.5
RS-D 216-98 BOX NO 12
DEPTH 102.5 - 112.5

RS-D 216-98 BOX NO 14
DEPTH 122.5 - 131.5

RS-D 216-98 BOX NO 13
DEPTH 112.5 - 122.5

RS-D 216-98 BOX NO 15
DEPTH 131.5 - 140 TD

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-216-98
LEASE
TAKEN BY
DEPTH 140'
DATE 4-1-98
DRIFT ANGLE +61°
DIRECTION
TYPE
JOB NO.
HI-1408

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-216-98
LEASE
TAKEN BY
DEPTH 70'
DATE 4-1-98
DRIFT ANGLE +61°
DIRECTION
TYPE
JOB NO.
HI-1408

40
SE
8
40
SE
6
30
SE
8
30
SE
6
20
SE
8
20
SE
6
30
20

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-216-98
LEASE
TAKEN BY
DEPTH Collar
DATE 4-1-98
DRIFT ANGLE +61°
DIRECTION
TYPE
JOB NO.
HI-1408

40
SE
6
40
SE
8
30
E
30
SE
5
20
E
6
20
SE
8
30
E
2