60001134

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-255-98
AUTHOR	S. King; K. Allen; A Niles
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.
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; photographs; total depth 137' receipt; handwritten notes; downhole camera images 27p. 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-255-98

6000 1134 4010

60001134

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

Hecla
MINING COMPANY

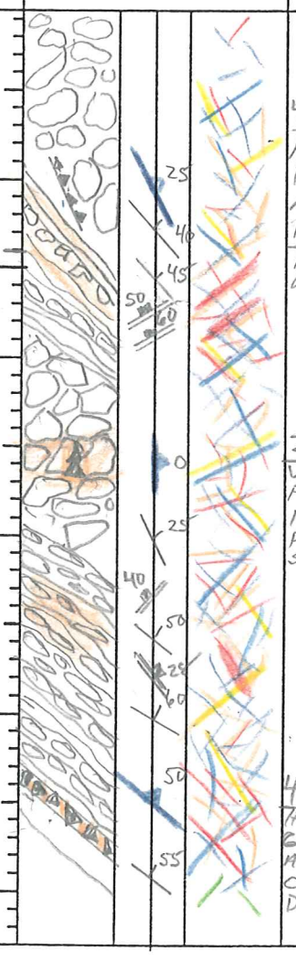
ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-255-98	LOCATION	STOPE 13, SOUTH ZONE SEC. 100
PAGE	1 OF 3	NORTHING	
DATE	7/24, 25/98	EASTING	
LOGGED BY	ALLYN NILES	ELEVATION	
SCALE	1" = 10'	AZIMUTH	240
TOTAL DEPTH	137'	INCLINATION	+25

REMARKS

LITH.	OX/RED.	LITHOLOGY	FT
0.0-137.0 PINK MATRIX BRECCIA		0.0-137.0 VARIABLE COLOR; PINK, LT. GRAY, GRAYISH PINK, RARE GREEN. INTERBEDDED FLOWS & PYROCLASTIC BRECCIAS. BRECCIAS ARE COMPOSED OF HOMOLITHIC SUBANGULAR TO ROUND CLASTS, PINK TO WHITE, IN A PINKISH FINE GRAIN VOLCANIC CLAY MATRIX. FLOWS ARE MOSTLY MARKED BY THIN FLOW BANDS OF ALTERNATING WHITE & PINK COLOR. OCCASIONAL INTRA-FLOW BRECCIAS UP TO 4" Ø ARE MARKED BY SMALL ANGULAR → ROUND CLASTS 30.0-44.8 POSSIBLE LAPILLI TUFF - ELONGATED, ROUND CLASTS IN PINK VERY FINE GRAIN CLAY MATRIX PIMA →	10 PIMA 20 30 40 50

GRAPHIC LOG

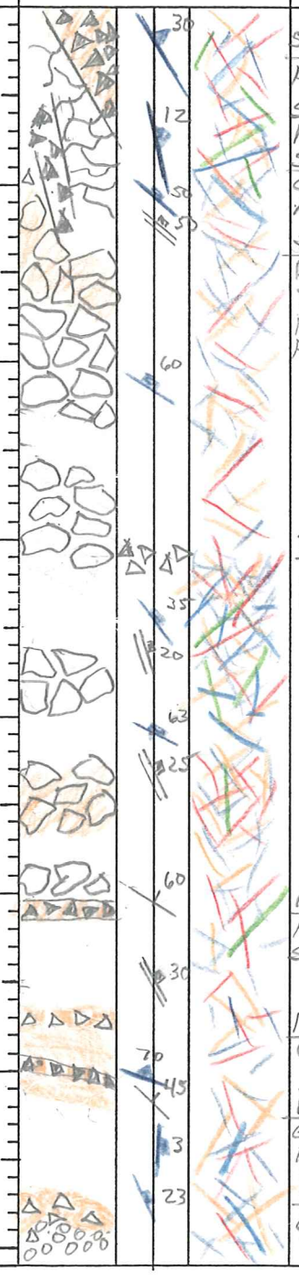


STRUCTURE	ALTERATION AND MINERALIZATION
4.5-137.0 HIGH FRACTURE DENSITY. LITTLE TO NO RQD 11.5 THIN (1") FAULT FORMS CONTACT W/ FLOW 25.5-26.0 VERTICAL (TO CORE) FAULT W/ ROUND FRAGS IN AN ARGILLIC ALT. POWDY, PROPYLITIC STAINED MATRIX. 44.8-45.3 HEALED FAULT, ROUND CLASTS IN A ARGILLIC ALT, VARIABLE HARD-SOFT CLAY MATRIX. ABUNDANT DISSEM. SULFIDES	0.0-4.5 WK. WHITE CLAY & SULFIDE VEINING. 4.5-44.0 VEINS FILLED W/ WHITE & BLACK CLAY, MARCASITE PYRITE, RARE(?) QUARTZ & LOCALLY COMMON CALCITE, BLACK CLAYS USUALLY RICH IN SULFIDES, RARELY TURN BLUE WHEN TREATED W/ H_2O OR HCl. 4.5-114.0 MOD. SULFIDE VEINING TIGHTENED SAMPLE INTERVALS 30.0-44.0 STRONG PRESENCE OF BLACK CLAYS IN VEINS 37.0-41.0 IRREGULAR SHAPED QUARTZ/SULFIDE FLOODED CHANNELS IN HOST ROCK 46.0-65.0 WK. → MOD PROPYLITIC STAINED CLAY IN FRACTURES 44.0-64.0 VEINS FILLED W/ WHITE CLAY, SOME CALCITE, BLADED MARCASITE, PYRITE

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
0.0	4.5					
4.5	8.5					
8.5	11.5					
11.5	14.0					
14.0	16.5					
16.5	19.0					
19.0	22.0					
22.0	24.2					
24.2	26.5					
26.5	27.5					
27.5	30.0					
30.0	32.0					
32.0	34.0					
34.0	36.0					
36.0	38.0					
38.0	40.0					
40.0	42.0					
42.0	44.0					
44.0	45.4					
45.4	49.0					

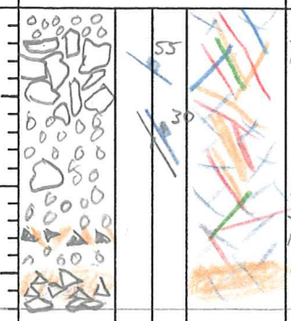
HOLE NUMBER D-255-98 PAGE 2 OF 3

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0.0 – 137.0 PINK MATRIX BRECCIA		0.0 – 137.0 INTERBEDDED FLOWS & PYROCLASTIC BRECCIAS PIMA →	60, 70, 80, 90, 100, 110, 120		51.9 – 53.7 FAULT BRECCIA SUBANG. → ROUND CLASTS, MOSAIC BRECCIA 53.7 – 57.0 CRACKLE ZONE NO ROTATION OF FRAGS 57.0 – 60.5 BRECCIA ZONE, ROUND TO ANGULAR FRAGS. PROBABLY RELATED TO FAULT @ 51.9 80.0 – 82.0 RUBBLE, MAYBE FAULT, NO BXA OBSERVED 100.5 – 101.2 FAULT BRECCIA, MATRIX SUPPORTED. 107.0 2" Ø FAULT GOUGE, SOFT 110.0 2" Ø FAULT GOUGE & BXA, SOFT, PUNKY 117.4 – 118.4 FAULT GOUGE W/ BXA FRAGS	51.9 – 53.7 WHITE CLAY & SULFIDES & CALCITE VEINS, 1/2" Ø SULFIDE VN. ON CNT. 53.7 – 57.0 WHITE TO GREEN CLAY FILLING OPEN SPACES, CALCITE 57.0 – 60.5 CEMENTED W/ WHITE & DARK CLAY & SULFIDES, CALCITE ALSO. 83.0 – 91.0 WHITE, BLACK & GREEN CLAY, VARIABLE CALCITE, SULFIDES AS VEINS & OPEN SPACE FILLINGS 91.0 – 95.0 STRONG BLACK & WHITE CLAY, SULFIDES. BLUE STAIN WHEN TREATED W/ H_2O_2 OR HCl, SOME GREEN CLAY 100.5 – 103.0 STRONG DISSEM. SULFIDES & ARGILLIC ALT. 107.0 HELD TOGETHER W/ GRAY MODELING CLAY 110.0 CONSIDERABLE WHITE CLAY AS CEMENT 114.0 – 118.5 WEAK SULFIDE VEINING 117.4 – 118.4 CEMENTED W/ SOFT, PUNKY MODELING CLAY.

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
49.0	51.3				
51.3	54.0				
54.0	58.5				
58.5	60.5				
60.5	64.0				
64.0	69.0				
69.0	72.5				
72.5	74.5				
74.5	78.0				
78.0	81.0				
81.0	84.0				
84.0	87.5				
87.5	89.0				
89.0	91.0				
91.0	93.0				
93.0	95.0				
95.0	97.0				
97.0	100.5				
100.5	103.0				
103.0	106.5				
106.5	109.5				
109.5	111.5				
111.5	114.0				
114.0	118.5				

HOLE NUMBER D-255-98 PAGE 3 OF 3

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0.0 – 137.0 PINK MATRIX BRECCIA		0.0 – 137.0 INTERBEDDED FLOWS & PYROCLASTIC BRECCIAS. SEE DESCRIPTION PAGE 1	130		118.5 – 122.0 RUBBLE POSSIBLE FAULT 127.0 – 137.0 RUBBLE POSSIBLE FAULT ZONE SOME CLAY GOUGE INTERCEPTS @ 134 & 136 – 137. BXA 132.5 – 133.0	113.0 – 126.0 CALCITE VEINS 95.0 – 137.0 VEINS & OPEN SPACES FILLED W/ WHITE CLAY, MARCASITE, SOME PYRITE OCCASIONAL GREEN CLAY. 118.5 – 137.0 MOD. SULFIDE VEINING, SHORTER SAMPLE INTERVALS
		PIMA →				
		T.D. 137.0'				

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
118.5	121.0				
121.0	123.0				
123.0	126.0				
126.0	128.0				
128.0	130.0				
130.0	133.0				
133.0	137.0				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-255-98 DATE: 7/24/98 LOGGED BY: ALLYN NILES PAGE 1 OF 5

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	4.5	100.0	93.3	11.1										
4.5	8.5	50.0	95.0	0.0										
8.5	14.0	20.0	104.0	0.0										
14.0	16.5	80.0	112.0	40.0										
16.5	19.0	0	80.0	0										
19.0	22.0	0	63.3	0										
22.0	26.5	0	100.0	0										
26.5	30.0	20.0	97.1	0										
30.0	33.5	0	100.0	0										
33.5	36.0	0	84.0	0										
36.0	40.0	0	90.0	0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-255-98 DATE: _____ LOGGED BY: _____ PAGE 2 OF 5

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)
40.0	44.0	0	87.5	0										
44.0	49.0	66.0	96.0											
49.0	54.0	50.0	90.0	44.0										
54.0	58.5	0	100.0	8.8										
58.5	60.5	0	100.0	0										
60.5	64.0	0	48.5	0										
64.0	69.0	0	74.0	0										
69.0	72.5	0	57.1	0										
72.5	74.5	0	85.0	0										
74.5	78.0	57.0	85.0	11.4										
78.0	80.0	0	85.0	0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-255-98 DATE: _____ LOGGED BY: _____ PAGE 3 OF 5

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
80.0	81.0	0	90.0	0										
81.0	82.0	0	90.0	0										
82.0	84.0	0	95.0	0										
84.0	89.0	92.0	100.0	34.0										
89.0	93.0	0	70.0	0.										
93.0	95.0	0	100.0	0										
95.0	96.5	0	100.0	0										
96.5	97.0	0	100.0	0										
97.0	97.5	0	60.0	0										
97.5	98.5	0	120.0	0										
98.5	100.5	0	98.0	0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-255-98 DATE: 7/25/98 LOGGED BY: _____ PAGE 4 OF 5

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)
100.5	103.0	0	100.0	0										
103.0	104.0	0	120.0	0										
104.0	106.5	0	88.0	0										
106.5	107.5	0	100.0	0										
107.5	111.5	0	100.0	0										
111.5	113.0	0	86.6	0										
113.0	114.0	0	90.0	0										
114.0	118.5	0	95.5	0										
118.5	123.0	0	100.0	0										
123.0	126.0	45.0	100.0	43.3										
126.0	128.0	0	90.0	0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-255-98 DATE: 7/25/98 LOGGED BY: ALLYN NILES PAGE 5 OF 5

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)
128.0	130.0	0	98.0	0										
130.0	133.0	0	93.3	0										
133.0	137.0	0	92.5	0										

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 89431-5902

(702) 356-0606

INVOICE NO: SP 0050091-IN
INVOICE DATE: 08/31/98

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-255-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
52	SAMPLES RECEIVED	.00	.00
51	JAW CRUSHING CHARGE	1.30	66.30
51	COARSE MILLING CHARGE	4.50	229.50
51	SPLITTING CHARGE	2.40	122.40
51	RING MILLING CHARGE	2.00	102.00
52	Au (1 A.T. FIRE ASSAY)	8.00	416.00
13	Au ANALYSES/GRAVIMETRIC	8.75	113.75
52	HYDROCHLORIC/NITRIC DIGESTION	2.00	104.00
52	Ag ANALYSES	1.00	52.00
9	Ag (ore grade) ANALYSES	5.00	45.00

(4200) 13-9999-477

NET INVOICE:	1,250.95
LESS DISCOUNT:	250.19
FREIGHT:	.00
INVOICE TOTAL:	1,000.76

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP050091

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-255-98 RECEIVED : 14 AUG 1998

No. SAMPLES : 52 REPORTED : 28 AUG 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 SP050091

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-255-98 0.0-4.5	0.004			0.09
D-255-98 4.5-8.5	0.020	0.022		0.39
D-255-98 8.5-11.5	0.004			0.29
D-255-98 11.5-14.0	0.027			0.46
D-255-98 14.0-16.5	0.065		0.089	1.35
D-255-98 16.5-19.0	0.614		0.561	11.92
D-255-98 19-22	0.375		0.380	4.42
D-255-98 22.0-24.2	0.014			0.29
D-255-98 24.2-26.5	0.021			0.52
D-255-98 26.5-27.5	0.011			1.12
D-255-98 27.5-30.0	0.004			0.10
D-255-98 30-32	0.014			1.01
D-255-98 32-34	0.082		0.074	3.58
D-255-98 34-36	0.817		0.872	4.53
D-255-98 36-38	0.338		0.356	2.68
D-255-98 38-40	0.060		0.080	0.26
D-255-98 40-42	0.058		0.061	0.48
D-255-98 42-44	0.010			0.18
D-255-98 44.0-45.4	0.092		0.118	0.99
D-255-98 45.4-49.0	0.002			0.06
D-255-98 49.0-51.3	<0.001			0.09
D-255-98 51.3-54.0	0.037			3.35
D-255-98 54.0-58.5	0.054		0.049	1.11
D-255-98 58.5-60.5	0.028			0.36
D-255-98 60.5-64.0	0.019			0.15

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP050091

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-255-98 64-69	0.027			0.35
D-255-98 69.0-72.5	0.020			0.16
D-255-98 72.5-74.5	0.006			0.11
D-255-98 74.5-78.0	0.005			0.11
D-255-98 78-81	0.052		0.043	1.49
D-255-98 81-84	0.003			0.10
D-255-98 84.0-87.5	0.005			0.11
D-255-98 87.5-89.0	0.006			0.48
D-255-98 89-91	0.004			0.23
D-255-98 91-93	0.047			1.29
D-255-98 93-95	0.027			1.27
D-255-98 95-97	0.003			0.15
D-255-98 97.0-100.5	0.034			0.51
D-255-98 100.5-103.0	0.012			0.23
D-255-98 103.0-106.5	0.027			0.35
D-255-98 106.5-109.5	0.031			0.47
D-255-98 109.5-111.5	0.038			0.69
D-255-98 111.5-114.0	0.011			1.00
D-255-98 114.0-118.5	0.015			0.80
D-255-98 118.5-121.0	0.047			0.59
D-255-98 121-123	0.108		0.107	3.61
D-255-98 123-126	0.037			0.52
D-255-98 126-128	0.007			0.14
D-255-98 128-130	0.014			0.27
D-255-98 130-133	0.127		0.132	1.70

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP050091

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-255-98 133-137	0.036			0.82
34530	0.528			2.86

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ANALYSIS REPORT SP050091

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-255-98 RECEIVED : 14 AUG 1998

No. SAMPLES : 52 REPORTED : 28 AUG 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 SP050091

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-255-98 64-69	0.027			0.35
D-255-98 69.0-72.5	0.020			0.16
D-255-98 72.5-74.5	0.006			0.11
D-255-98 74.5-78.0	0.005			0.11
D-255-98 78-81	0.052		0.043	1.49
D-255-98 81-84	0.003			0.10
D-255-98 84.0-87.5	0.005			0.11
D-255-98 87.5-89.0	0.006			0.48
D-255-98 89-91	0.004			0.23
D-255-98 91-93	0.047			1.29
D-255-98 93-95	0.027			1.27
D-255-98 95-97	0.003			0.15
D-255-98 97.0-100.5	0.034			0.51
D-255-98 100.5-103.0	0.012			0.23
D-255-98 103.0-106.5	0.027			0.35
D-255-98 106.5-109.5	0.031			0.47
D-255-98 109.5-111.5	0.038			0.69
D-255-98 111.5-114.0	0.011			1.00
D-255-98 114.0-118.5	0.015			0.80
D-255-98 118.5-121.0	0.047			0.59
D-255-98 121-123	0.108		0.107	3.61
D-255-98 123-126	0.037			0.52
D-255-98 126-128	0.007			0.14
D-255-98 128-130	0.014			0.27
D-255-98 130-133	0.127		0.132	1.70

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP050091

Amer Ass. Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-255-98 133-137	0.036			0.82
34530	0.528			2.86

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

Sparks Office
1500 Glendale Ave.
Nevada 89431
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Elko, NV 89801
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(702) 738-9100
Fax
(702) 738-2594

Mazatlan Office
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011-52-69-170035

Other Offices
Lima, Peru
Santiago, Chile
Mendoza, Argentina

Company: ROSEBUD MINING CO

Address: 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: 8/12/98 Number of Samples: 51

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

SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED	
D-255-98			AU-AG ACCORDING TO ROSEBUD	
~~[illegible]~~	32-34		MINE PROTOCOL	
~~[illegible]~~	34-36			
0-4.5	36-38		69-72.5	100.5-103
4.5-7.5	38-40		72.5-74.5	103-106.5
7.5-11.5	40-42		74.5-78	106.5-109.5
11.5-14	42-44		78-81	109.5-111.5
14-16.5	44-45.4		81-84	111.5-114
16.5-19	45.4-49		84-87.5	114-118.5
19-22	49-51.3		87.5-89	118.5-121
22-24.2	51.3-54		89-91	121-123
24.2-26.5	54-58.5		91-93	123-126
26.5-27.5	58.5-60.5		93-95	126-128
27.5-30	60.5-64		95-97	128-130
30-32	64-69		97-100.5	130-133 133-137 Tot

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:

CLIENT FILE COPY

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP050091

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-255-98 RECEIVED : 14 AUG 1998

No. SAMPLES : 52 REPORTED : 28 AUG 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 SP050091

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)	
D-255-98 0.0-4.5	0.004			0.09	
D-255-98 4.5-8.5	0.020	0.022		0.39	
D-255-98 8.5-11.5	0.004			0.29	
D-255-98 11.5-14.0	0.027			0.46	16.5-22' = 5.5'
D-255-98 14.0-16.5	0.065		0.089	1.35	@
D-255-98 16.5-19.0 2.5	0.614		0.561	11.92	0.484 Au
D-255-98 19-22 3	0.375		0.380	4.42	7.83 Ag
D-255-98 22.0-24.2	0.014			0.29	
D-255-98 24.2-26.5	0.021			0.52	
D-255-98 26.5-27.5	0.011			1.12	
D-255-98 27.5-30.0	0.004			0.10	
D-255-98 30-32	0.014			1.01	
D-255-98 32-34	0.082		0.074	3.58	
D-255-98 34-36	0.817		0.872	4.53	
D-255-98 36-38	0.338		0.356	2.68	
D-255-98 38-40	0.060		0.080	0.26	
D-255-98 40-42	0.058		0.061	0.48	
D-255-98 42-44	0.010			0.18	
D-255-98 44.0-45.4	0.092		0.118	0.99	
D-255-98 45.4-49.0	0.002			0.06	
D-255-98 49.0-51.3	<0.001			0.09	
D-255-98 51.3-54.0	0.037			3.35	
D-255-98 54.0-58.5	0.054		0.049	1.11	
D-255-98 58.5-60.5	0.028			0.36	
D-255-98 60.5-64.0	0.019			0.15	

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP050091

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-255-98 64-69	0.027			0.35
D-255-98 69.0-72.5	0.020			0.16
D-255-98 72.5-74.5	0.006			0.11
D-255-98 74.5-78.0	0.005			0.13
D-255-98 78-81	0.052		0.043	1.49
D-255-98 81-84	0.003			0.10
D-255-98 84.0-87.5	0.005			0.11
D-255-98 87.5-89.0	0.006			0.48
D-255-98 89-91	0.004			0.23
D-255-98 91-93	0.047			1.29
D-255-98 93-95	0.027			1.27
D-255-98 95-97	0.003			0.15
D-255-98 97.0-100.5	0.034			0.51
D-255-98 100.5-103.0	0.012			0.23
D-255-98 103.0-106.5	0.027			0.35
D-255-98 106.5-109.5	0.031			0.47
D-255-98 109.5-111.5	0.038			0.69
D-255-98 111.5-114.0	0.011			1.00
D-255-98 114.0-118.5	0.015			0.80
D-255-98 118.5-121.0	0.047			0.59
D-255-98 121-123	0.108		0.107	3.61
D-255-98 123-126	0.037			0.52
D-255-98 126-128	0.007			0.14
D-255-98 128-130	0.014			0.27
D-255-98 130-133	0.127		0.132	1.70

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP050091

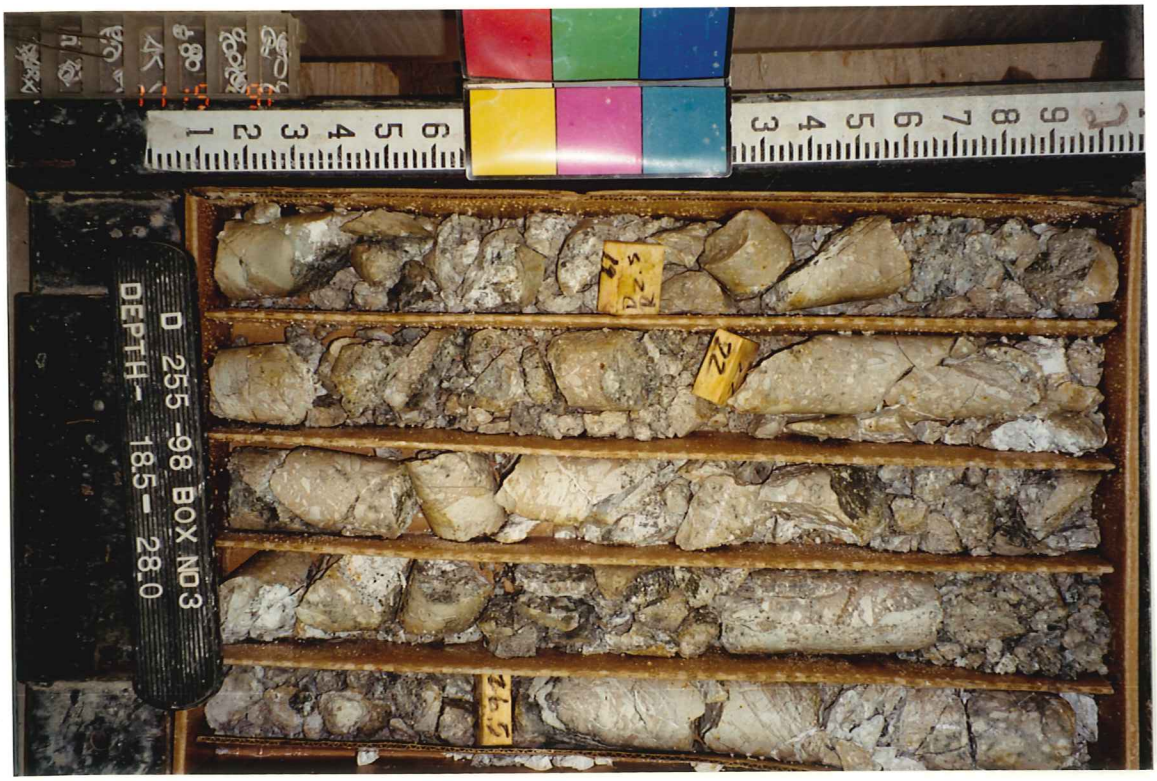
CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-255-98

REPORTED : 28 AUG 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-255-98 133-137	0.036			0.82
34530	0.528			2.86

D 255 -98 BOX NO 2
DEPTH- 9.5- 18.5

D 255 -98 BOX NO 1
DEPTH- 0.0- 9.5


D 255 -98 BOX NO 3
DEPTH- 18.5- 28.0

D 255 -98 BOX NO 5
DEPTH- 36.5 - 46.5

D 255 -98 BOX NO 4
DEPTH- 28.0 - 36.5

D 255 -98 BOX NO 6
DEPTH- 56.0 - 66.5

D 255 -98 BOX NO 9
DEPTH- 78.0- 88.0

D 255 -98 BOX NO 8
DEPTH- 66.5- 78.0

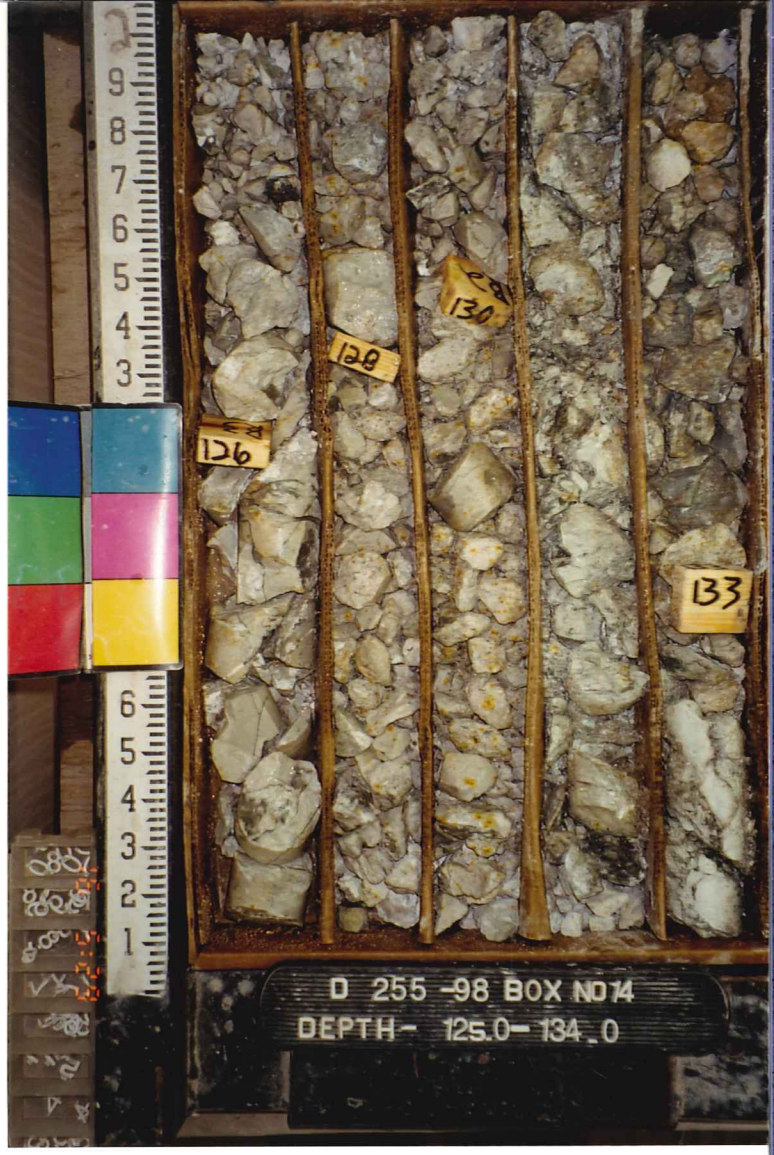
D 255 -98 BOX NO 10
DEPTH- 88.0- 97.5

D 255 -98 BOX NO12
DEPTH- 106.0-115.0
113
114
111.5

D 255 -98 BOX NO11
DEPTH- 97.5-106.0
100.5
98.5
103

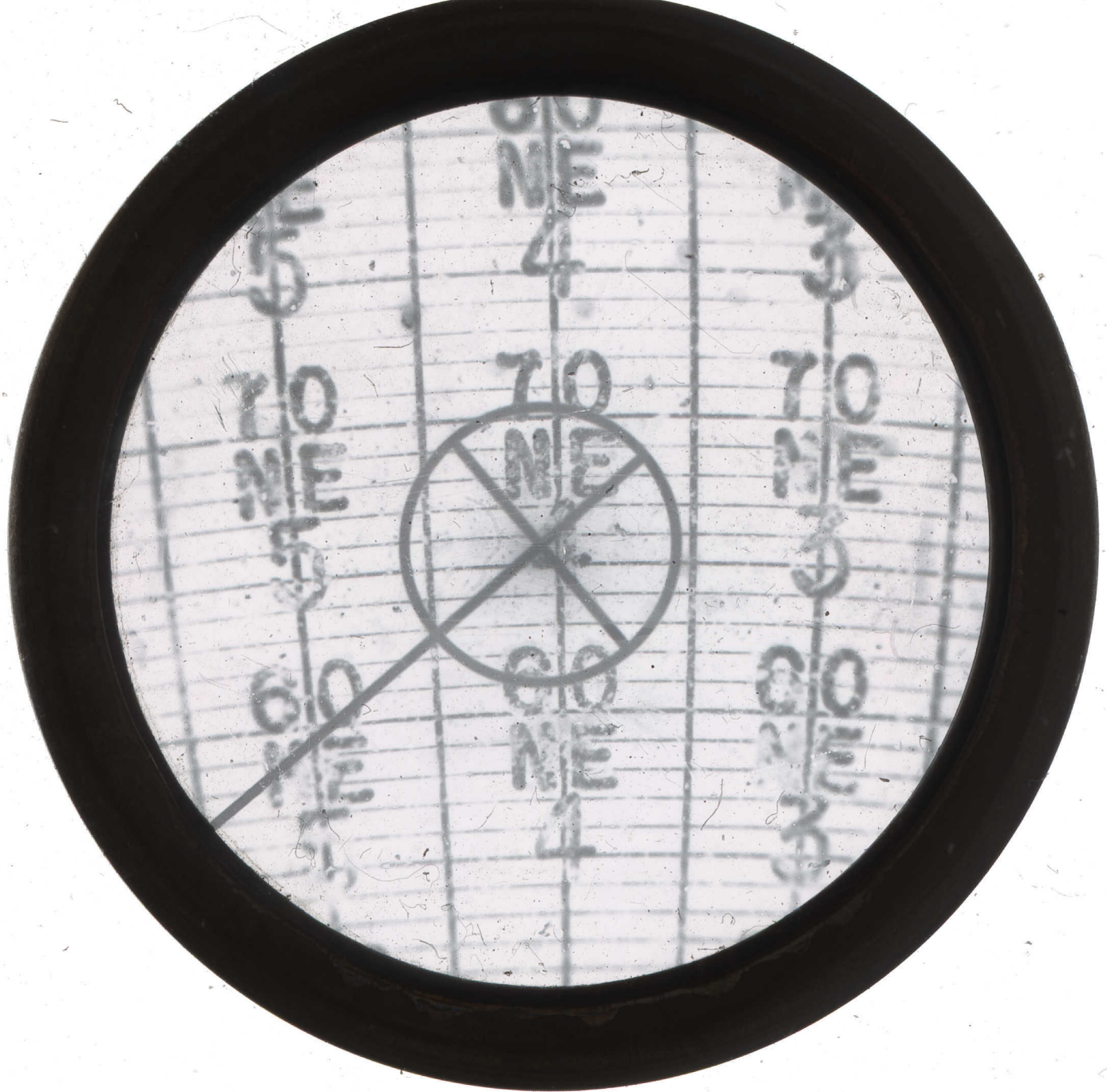
D 255 -98 BOX NO13
DEPTH- 115.0-125.0
118.5
123

D 255 -98 BOX NO14
DEPTH- 134.0-137.0 TD


126
128
130
133
D 255 -98 BOX NO14
DEPTH- 125.0-134.0

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-255-98
LEASE [redacted]
TAKEN BY Jerome
DEPTH collar
DATE 5-14-98
DRIFT ANGLE 0
DIRECTION 125
TYPE
JOB NO. 1
HI-1408



SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-255-98
LEASE
TAKEN BY Jerome
DEPTH 110'
DATE 7-14-98
DRIFT ANGLE
DIRECTION F25°
TYPE
JOB NO. 1

HI-1408

80
NE
4
70
NE
3
60
NE
4
70
NE
5
60
NE
5

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-255-98
LEASE
TAKEN BY Jerome
DEPTH 55'
DATE 5-14-98
DRIFT ANGLE 0
DIRECTION +25
TYPE
JOB NO. 1
HI-1408

70
NE
60
NE
70
NE
60
NE
70
NE
60
NE