60001113

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-233-98
AUTHOR	B. Clarkson; K. Allen; S. King
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 logs; geology; assay; photographs; total depth 207'; receipt; handwritten notes 26p.

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 1/13/08
Initials Date
DB: mch
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

D-233-98

60001113 40D

6000113

Hecla MINING COMPANY

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

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-233-98	LOCATION	STOPE 13
PAGE	1 OF 4	NORTHING	
DATE	6-22-98	EASTING	
LOGGED BY	BETHANY CLARKSON	ELEVATION	
SCALE	1" = 10'	AZIMUTH	305°
TOTAL DEPTH	207'	INCLINATION	+20°

REMARKS

ITH.	OX / RED.	LITHOLOGY	FT	GRAPHIC LOG (LITHOLOGY, FRACTURE, STRUCTURE, VEIN, MINERALIZATN)	STRUCTURE	ALTERATION AND MINERALIZATION
0.0 - 207.0 PINK MATRIX BRECCIA		0.0'-207.0': LIGHT GRY MATRIX-SUPPORTED, MONOLITHIC (?) PRIMARY (?) BRECCIA. APHANITIC MATRIX. ANGULAR TO SUBANGULAR CLASTS UP TO 1" IN DIAMETER.	0			0.0-24.4': TRACE PERVASIVE ARGILLIZATN; WK/MOD. BLCHING. WK PY + CALCITE VNLTS TR. WHT CLAY ON FRAX. TRACE PERVASIVE DISSEM. PY
			10			
			20			
			30	30 / 18 / 60	24.6-25.8': FRIABLE WKLY/MODLY DEVELOPED FAULT ZONE, UNHEALED. 28.0-29.0': STRIATED, SLICKENSIDES. 31.5-32.2': FRIABLE, STRONGLY AUTOBRECCIATED ZONE	24.6-25.8': MOD/STR ARGILLIZATION TRACE GRN CLAY + VFG GRY SULFIDE ON FLT TRACE. 28.0-29.0' SULFIDES ALONG SLICKENSIDES, MORE BLEACHED. 31.5-32.2' TRACE GRN CLAY. 25.8-39.0' CALCITE + SULFIDE VNLTS; TRACE WHT CLAY VNLTS. PERVASIVE DISSEM. PY. 38.0': ½" SULFIDE VEIN - MARCASITE. 39.0-48.0' MOD INCREASE IN DISSEM PY; TRACE GRN CLAY VNLTS; SAME CALCITE + PY VNLTS
		41.5 - 50.0' SAME AS ABOVE; SOME LARGER CLASTS UP TO 3" DIAM; SOME CLASTS SHOW FLOW BANDING	40			
			50			48.0- : CALCITE + SULFIDE VNLTS; DISSEM PY

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
0	5.0					
5.0	10.0					
10.0	15.0					
15.0	20.0					
20.0	24.4					
24.4	26.0					
26.0	29.0					
29.0	34.0					
34.0	37.2					
37.2	39.0					
39.0	44.0					
44.0	49.0					

HOLE NUMBER D-233-98 PAGE 2 OF 4

LITH.	% RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0.0 - 207.0' PINK MATRIX BRECCIA		SEE DESCRIPTION PAGE 1 70.0 - 81.0': MATRIX DOMINANTLY LGT PINKISH COLOR 81.0 - : MATRIX DOMINANTLY LGT GRY-GRN 83.0 - 105.0': CONTAINS SOME LARGE CLASTS >4" DIAM	60 70 80 90 100 110 120	28 18	61.1 - 61.3': 2" FRIABLE ZONE ~ 64.0': FRIABLE 65.8 - 66.2': FRIABLE	SEE DESCRIPT. PAGE 1 55.5 - 55.7': GRN CLAY, INCOMPETENT 55.7 - 59.0': LESS PERVASIVE BLEACHING; BLEACH RIMS ON CLASTS 59.0 - 62.2': PERVASIVE DISS. MARC + PY 61.1 - 61.3': MOD ARGILLIZATION: ~ 64.0': 3" GRN CLAY ARGILL; WHT CLAY ON FRAX SURFACE 65.8 - 66.2': GRN CLAY W/ DARK GRY SULFIDES 64.0' - 120.0': DISSEM BLADED MARC; DISSEM PY; SULFIDE VNLTS & CLUSTERS - SOME W/CALCITE 100.5 - 101.9': 1" WIDE CALCITE VN - NEARLY BARREN OF SULFIDE 107.7 - 108.9': PURE CALCITE VEIN APROX. 3/4" DIAM. 117.5 - 118.5': MOD WHT CLAY ARGILL

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
49.0	54.0				
54.0	59.0				
59.0	64.0				
64.0	70.0				
70.0	74.6				
74.6	80.0				
80.0	85.0				
85.0	90.0				
90.0	95.0				
95.0	99.9				
99.9	105.0				
105.0	110.0				
110.0	115.0				
115.0	120.0				

HOLE NUMBER D-233-98 PAGE 3 OF 4

LITH.	% RED	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0.0-207.0' PINK MATRIX BX		SAME AS ABOVE: LT GRY-GRN MATRIX-SPPTD BX; APHANITIC MATRIX; ANGULAR TO SUB-ANGULAR CLASTS MOSTLY UP TO 1" DIAM, CONTAINS SOME LARGER CLASTS UP TO 4" DIAM 123.0 - 127.0': FLOW BANDING THRU MATRIX - CLASTS ELONGATED ‖ TO FLOW 152.6 - 155.0': INTERMITTENT FLOW BANDING 156.0 - 164.3': DOMINANTLY LT PINK MATRIX 164.3 - 165.3': NO BX; 1' CLAST? 164.3 - 166.0': DOMINANTLY LT GRN MATRIX 166.0 - 172.0': DOMINANTLY LT PINK MATRIX 172.0 - 179.9': DOMINANTLY LT GRN MATRIX 179.9 - 190.0': DOMINANTLY LT PINK MATRIX	130 140 150 160 170 180 190	60 35 35 18 60 50 60 18 60 50 28	121.2': FRACTURE 122.5 - 123.0': FRIABLE, MOD ARGILL. BX ZONE 132.0': FRACTURE 138.6': FRACTURE 154.5': FRACTURE 161.3 - 161.7' POSSIBLE FAULT - ROCK FLOUR ← FLOW BANDS 171.6': FRACTURE 186.5': FRACTURE	120.0 - 207.0: TRACE PERVASIVE ARGILLIZAT'N; WK/MOD BLEACHING, TRACE PERVASIVE DISSEM PY, TRACE VNLTS OF PY + CALCITE 138.2 - 139.2': SULFIDE VN 139.2 - 142.0': MOD ARGILL - WHT & GRN CLAY, FRAX FILLED W/SULFIDES, SLICKENSIDES W/SULFIDES 142.0 - 143.2': MOD/STRNG WHT CLAY ARGILL; FRIABLE 145.5 - 152.6': MOD/STRG WHT CLAY ARGILL; FRIABLE; DISSEM PY; SULFIDE VNLTS PERVASIVE 152.6 - 164.3': DISSEM PY, CALCITE + SULFIDE VNLTS 158.9 - 159.4': GRN CLAY MATRIX 161.3 - 161.7': WHT CLAY, FRIABLE, ROCK FLOUR 164.3 - 168.0': NO VNLTS; PERVASIVE DISSEM PY 168.0 - 169.7': PY + CALCITE VEIN, DISSEM PY & MARC 171.0' - 176.0': TRACE PERVASIVE PY & MARC; CALCITE & SULFIDE VNLTS 176.0 - 185.8': VERY TRACE VNLTS; PERVASIVE DISS MARC & PY 183.3 - 189.7': TRACE SULFIDE VNLTS 186.0 - 191.0': DENSE SULFIDE CLUSTERS - INTERMITTENT 188.9 - 189.4': STRG WHT CLAY ARGILL; SULFIDE VN 1/8" WIDE

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
120.0	124.6				
124.6	130.0				
130.0	137.0				
137.0	139.2				
139.2	143.3				
143.3	145.9				
145.9	149.0				
149.0	152.6				
152.6	155.0				
155.0	160.5				
160.5	164.3				
164.3	168.0				
168.0	170.0				
170.0	175.0				
175.0	180.0				
180.0	185.3				
185.3	189.7				

HOLE NUMBER D-233-98 PAGE 4 OF 4

LITH.	OX/RED	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0.0 - 207.0' PINK MATRIX BX		SAME AS ABOVE: SEE DESCRIPTION PAGE 3 190.0 - 194.2': DOMINANTLY LT. GRN MATRIX 194.2 - 207.0': DOMINANTLY LT PINK MATRIX GRADING TO MED PINK WITH INCREASING DEPTH	200	60 26 40	190.8': FRACTURE 195.5': FRACTURE	189.7 - 198.1': TRACE TO NONE SULFIDE VNLTS; DISSEM PY & MARC. 196.0 - 199.8: INCREASE IN DISSEM SULFIDES 198.1 - 207.0': INCREASE IN SULFIDE VNLTS - STILL TRACE; TRACE WHT CLAY VNLTS 200.0 - 200.5': SULFIDE VNLT 1/8" WIDE
			210	BOTTOM OF HOLE		

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
189.7	195.0				
195.0	201.0				
201.0	207.0				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-233-98 DATE: 6-22-98 LOGGED BY: BLC PAGE 1 OF 3

DRILL RUN		SOLID CORE	TOTAL CORE	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO	RECOVERY (%)	RECOVERY (%)		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	5.0	80.0	90.0	16.0										
5.0	10.0	100.0	100.0	16.0										
10.0	12.0	77.5	100.0	20.0										
12.0	15.0	90.0	100.0	35.0										
15.0	20.0	87.0	96.0	19.0										
20.0	25.0	93.0	93.0	58.0										
25.0	29.0	45.0	70.0	10.0										
29.0	34.0	96.0	96.0	47.0										
34.0	39.0	99.0	99.0	52.0										
39.0	49.0	98.0	98.0	71.0										
49.0	59.0	96.0	97.5	52.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE #: D-233-98 DATE: 6-22-98 LOGGED BY: BLC PAGE 2 OF 3

DRILL RUN FROM	DRILL RUN TO	SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH DOWNHOLE DEPTH	ROCK STRENGTH POINT LOAD INDEX (psi)	FRACTURE DATA FRACTURE DENSITY/FT.	FRACTURE DATA AVG. ANGLE TO C.A.	FRACTURE DATA ROUGHNESS	FRACTURE DATA INFILL	DENSITY DATA DOWNHOLE DEPTH	DENSITY DATA SAMPLE WEIGHT (g)	DENSITY DATA DISPLACEMENT (cc)	DENSITY DATA DENSITY (g/cc)
59	64	96.0	99.0	47.0										
64	70	92.0	100.0	37.5										
70	80	94.0	97.0	58.0										
80	90	101.0	101.0	60.0										
90	95	96.0	96.0	48.0										
95	105	102.0	102.0	81.0										
105	112	101.0	101.0	41.4										
112	120	107.0	107.0	54.0										
120	130	94.0	94.0	66.0										
130	137	89.0	100.0	65.7										
137	142	92.0	97.0	34.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE #: D-233-98 DATE: 6-23-98 LOGGED BY: BLC 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)
142	149	60.0	97.0	25.0										
149	155	78.3	102.5	25.8										
155	162	104.3	104.3	77.0										
162	172	94.0	102.0	66.5										
172	182	89.0	95.0	58.0										
182	186.5	86.7	95.6	43.3										
186.5	196.7	100.0	103.4	67.0										
196.7	207	92.0	100.0	50.0										
	end of hole													

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 0049320-IN
INVOICE DATE: 07/15/98

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-293-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
47	SAMPLES RECEIVED	.00	.00
46	DRYING	1.00	46.00
46	JAW CRUSHING CHARGE	1.30	59.80
46	COARSE MILLING CHARGE	4.50	207.00
46	SPLITTING CHARGE	2.40	110.40
46	FINE MILLING CHARGE	2.00	92.00
47	Au (1 A.T. FIRE ASSAY)	8.00	376.00
19	Au ANALYSES/GRAVIMETRIC	8.75	166.25
47	HYDROCHLORIC/NITRIC DIGESTION	2.00	94.00
47	Ag ANALYSES	1.00	47.00
7	Ag (ore grade) ANALYSES	5.00	35.00

4700-13-9999-477

NET INVOICE:	1,233.45
LESS DISCOUNT:	246.69
FREIGHT:	.00
INVOICE TOTAL:	986.76

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ANALYSIS REPORT SP049320

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-233-98 RECEIVED : 29 JUN 1998

No. SAMPLES : 47 REPORTED : 10 JUL 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 SP049320

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-233-98

REPORTED : 10 JUL 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-233-98 00-05	0.121		0.131	2.82
D-233-98 05-10	0.072		0.067	2.48
D-233-98 10-15	0.058	0.056	0.065	1.91
D-233-98 15-20	0.229		0.242	8.53
D-233-98 20.0-24.4	0.170		0.163	10.70
D-233-98 24.4-26.0	0.241		0.241	1.41
D-233-98 26-29	0.143		0.050	2.36
D-233-98 29-34	0.126		0.122	0.52
D-233-98 34.0-37.2	0.309		0.328	1.12
D-233-98 37.2-39.0	0.032			0.41
D-233-98 39-44	0.009			0.08
D-233-98 44-49	0.015			0.05
D-233-98 49-54	0.006			0.07
D-233-98 54-59	0.004			0.06
D-233-98 59-64	0.036			0.32
D-233-98 64-70	0.082		0.079	0.44
D-233-98 70.0-74.6	0.008			0.09
D-233-98 74.6-80.0	0.005			0.07
D-233-98 80-85	0.005			0.07
D-233-98 85-90	0.007			0.04
D-233-98 90-95	0.004			0.20
D-233-98 95.0-99.9	0.001			0.18
D-233-98 99.9-105.0	0.019			0.11
D-233-98 105-110	0.042			0.25
D-233-98 110-115	0.129		0.129	0.32

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ANALYSIS REPORT SP049320

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-233-98

REPORTED : 10 JUL 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-233-98 115-120	0.144		0.131	0.17
D-233-98 120.0-124.6	0.199		0.240	0.44
D-233-98 124.6-130.0	0.008			0.04
D-233-98 130-137	0.014			0.46
D-233-98 137.0-139.2	0.280		0.292	1.23
D-233-98 139.2-143.3	0.653		0.745	2.63
D-233-98 143.3-145.9	0.051		0.049	0.22
D-233-98 145.9-149.0	0.145		0.147	0.33
D-233-98 149.0-152.6	0.156		0.162	0.52
D-233-98 152.6-155.0	0.010			0.11
D-233-98 155.0-160.5	0.013			0.21
D-233-98 160.5-164.3	0.006			0.94
D-233-98 164.3-168.0	0.001			0.04
D-233-98 168-170	0.075		0.075	0.35
D-233-98 170-175	0.004			0.14
D-233-98 175-180	0.005			0.08
D-233-98 180.0-185.3	0.005			0.13
D-233-98 185.3-189.7	0.012			0.36
D-233-98 189.7-195.0	<0.001			0.03
D-233-98 195-201	0.002			0.10
D-233-98 201-207	<0.001			0.03
34565	0.518			3.10

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ANALYSIS REPORT SP049320

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-233-98 RECEIVED : 29 JUN 1998

No. SAMPLES : 47 REPORTED : 10 JUL 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 SP049320

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-233-98

REPORTED : 10 JUL 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-233-98 00-05	0.121		0.131	2.82
D-233-98 05-10	0.072		0.067	2.48
D-233-98 10-15	0.058	0.056	0.065	1.91
D-233-98 15-20	0.229		0.242	8.53
D-233-98 20.0-24.4	0.170		0.163	10.70
D-233-98 24.4-26.0	0.241		0.241	1.41
D-233-98 26-29	0.143		0.050	2.36
D-233-98 29-34	0.126		0.122	0.52
D-233-98 34.0-37.2	0.309		0.328	1.12
D-233-98 37.2-39.0	0.032			0.41
D-233-98 39-44	0.009			0.08
D-233-98 44-49	0.015			0.05
D-233-98 49-54	0.006			0.07
D-233-98 54-59	0.004			0.06
D-233-98 59-64	0.036			0.32
D-233-98 64-70	0.082		0.079	0.44
D-233-98 70.0-74.6	0.008			0.09
D-233-98 74.6-80.0	0.005			0.07
D-233-98 80-85	0.005			0.07
D-233-98 85-90	0.007			0.04
D-233-98 90-95	0.004			0.20
D-233-98 95.0-99.9	0.001			0.18
D-233-98 99.9-105.0	0.019			0.11
D-233-98 105-110	0.042			0.25
D-233-98 110-115	0.129		0.129	0.32

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP049320

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-233-98

REPORTED : 10 JUL 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-233-98 115-120	0.144		0.131	0.17
D-233-98 120.0-124.6	0.199		0.240	0.44
D-233-98 124.6-130.0	0.008			0.04
D-233-98 130-137	0.014			0.46
D-233-98 137.0-139.2	0.280		0.292	1.23
D-233-98 139.2-143.3	0.653		0.745	2.63
D-233-98 143.3-145.9	0.051		0.049	0.22
D-233-98 145.9-149.0	0.145		0.147	0.33
D-233-98 149.0-152.6	0.156		0.162	0.52
D-233-98 152.6-155.0	0.010			0.11
D-233-98 155.0-160.5	0.013			0.21
D-233-98 160.5-164.3	0.006			0.94
D-233-98 164.3-168.0	0.001			0.04
D-233-98 168-170	0.075		0.075	0.35
D-233-98 170-175	0.004			0.14
D-233-98 175-180	0.005			0.08
D-233-98 180.0-185.3	0.005			0.13
D-233-98 185.3-189.7	0.012			0.36
D-233-98 189.7-195.0	<0.001			0.03
D-233-98 195-201	0.002			0.10
D-233-98 201-207	<0.001			0.03
34565	0.518			3.10

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP049320

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-233-98 RECEIVED : 29 JUN 1998

No. SAMPLES : 47 REPORTED : 10 JUL 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 SP049320

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-233-98

REPORTED : 10 JUL 1998

SAMPLES		Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)	
D-233-98 00-05		0.121		0.131	2.82	
D-233-98 05-10		0.072		0.067	2.48	15-37.2 = 22.2 @
D-233-98 10-15		0.058	0.056	0.065	1.91	
D-233-98 15-20	5	0.229		0.242	8.53	
D-233-98 20.0-24.4	4.4	0.170		0.163	10.70	0.195 Au
D-233-98 24.4-26.0	1.6	0.241		0.241	1.41	4.74 Ag
D-233-98 26-29	3	0.143		0.050	2.36	
D-233-98 29-34	5	0.126		0.122	0.52	
D-233-98 34.0-37.2	3.2	0.309		0.328	1.12	
D-233-98 37.2-39.0		0.032			0.41	
D-233-98 39-44		0.009			0.08	
D-233-98 44-49		0.015			0.05	
D-233-98 49-54		0.006			0.07	
D-233-98 54-59		0.004			0.06	
D-233-98 59-64		0.036			0.32	
D-233-98 64-70		0.082		0.079	0.44	
D-233-98 70.0-74.6		0.008			0.09	
D-233-98 74.6-80.0		0.005			0.07	
D-233-98 80-85		0.005			0.07	
D-233-98 85-90		0.007			0.04	
D-233-98 90-95		0.004			0.20	
D-233-98 95.0-99.9		0.001			0.18	
D-233-98 99.9-105.0		0.019			0.11	
D-233-98 105-110		0.042			0.25	
D-233-98 110-115		0.129		0.129	0.32	

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115 – 152.6
37.6 '@

SAMPLES		Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)	
D-233-98 115-120	5	0.144		0.131	0.17	
D-233-98 120.0-124.6	4.6	0.199		0.240	0.44	0.165 Au
D-233-98 124.6-130.0	5.4	0.008			0.04	0.62 Ag
D-233-98 130-137	7	0.014			0.46	
D-233-98 137.0-139.2	2.2	0.280		0.292	1.23	
D-233-98 139.2-143.3	4.1	0.653		0.745	2.63	
D-233-98 143.3-145.9	2.6	0.051		0.049	0.22	
D-233-98 145.9-149.0	3.1	0.145		0.147	0.33	
D-233-98 149.0-152.6	3.6	0.156		0.162	0.52	
D-233-98 152.6-155.0		0.010			0.11	
D-233-98 155.0-160.5		0.013			0.21	
D-233-98 160.5-164.3		0.006			0.94	
D-233-98 164.3-168.0		0.001			0.04	
D-233-98 168-170		0.075		0.075	0.35	
D-233-98 170-175		0.004			0.14	
D-233-98 175-180		0.005			0.08	
D-233-98 180.0-185.3		0.005			0.13	
D-233-98 185.3-189.7		0.012			0.36	
D-233-98 189.7-195.0		<0.001			0.03	
D-233-98 195-201		0.002			0.10	
D-233-98 201-207		<0.001			0.03	
34565		0.518			3.10	

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

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Other Offices
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Santiago, Chile
Mendoza, Argentina

Company: ROSEBUD MINING CO. LLC

Address: P.O. BOX 2610

City WINNEMUCCA State NV Zip 89820

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

Project Name: DEVELOPMENT Purchase Order Number: _____

Date Submitted: 6/26/98 Number of Samples: _____

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

SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED	
DR33-98			AU-AG ACCORDING TO	
			ROSEBUD MINE PROTOCOL	
0.0 - 5.0	54.0 - 59.0		120.0 - 124.6	170.0 - 175.0
5.0 - 10.0	59.0 - 64.0		124.6 - 130.0	175.0 - 180.0
10.0 - 15.0	64.0 - 70.0		130.0 - 137.0	180.0 - 185.3
15.0 - 20.0	70.0 - 74.6		137.0 - 139.2	185.3 - 189.7
20.0 - 24.4	74.6 - 80.0		139.2 - 143.3	189.7 - 195.0
24.4 - 26.0	80.0 - 85.0		143.3 - 145.9	195.0 - 201.0
26.0 - 29.0	85.0 - 90.0		145.9 - 149.0	201.0 - 207.0
29.0 - 34.0	90.0 - 95.0		149.0 - 152.6	
34.0 - 37.2	95.0 - 99.9		152.6 - 155.0	
37.2 - 39.0	99.9 - 105.0		155.0 - 160.5	
39.0 - 44.0	105.0 - 110.0		160.5 - 164.3	
44.0 - 49.0	110.0 - 115.0		164.3 - 168.0	
49.0 - 54.0	115.0 - 120.0		168.0 - 170.0	

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:

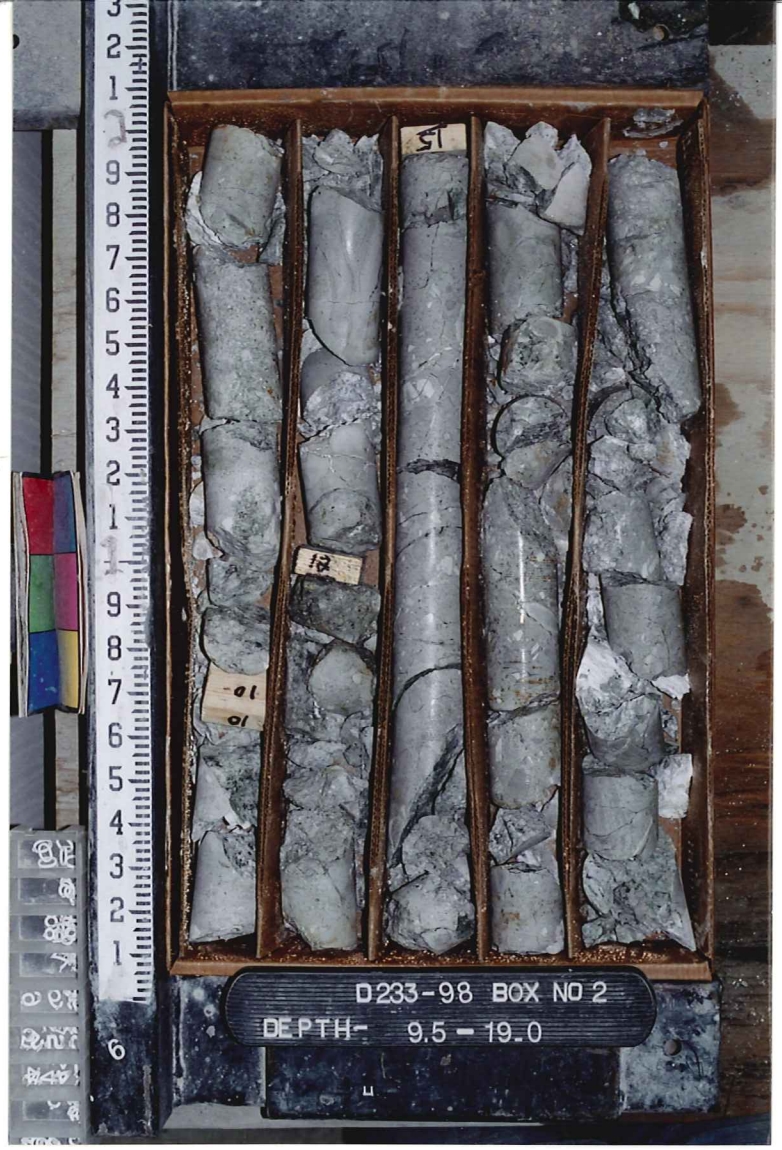
KURT ALLEN

Results to:

KURT ALLEN

Comments:

CLIENT FILE COPY


D233-98 BOX NO 2
DEPTH- 9.5 - 19.0

D233-98 BOX NO1
DEPTH- 0.0 -9.5

D233-98 BOX NO3
DEPTH- 19.0 -29.0

39
D233-98 BOX NO 5
DEPTH- 38.5 - 48.0

39
D233-98 BOX NO4
DEPTH- 29.0 - 38.5

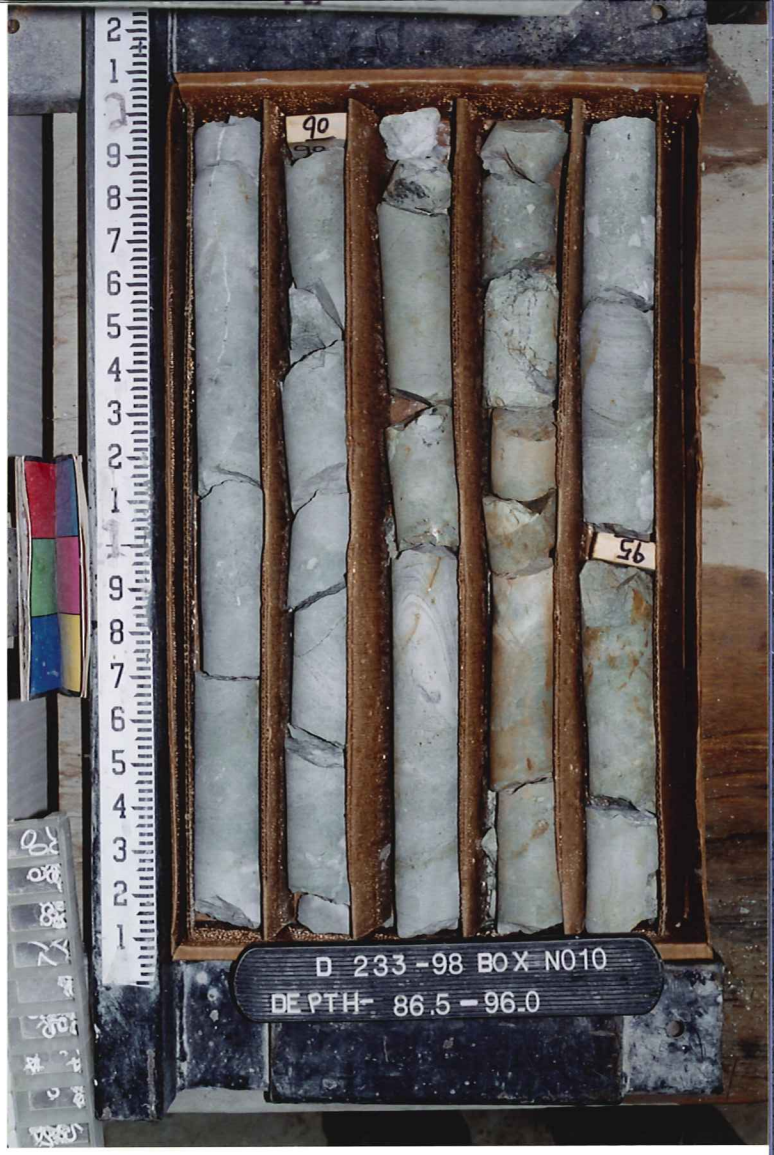
49
D233-98 BOX NO6
DEPTH- 48.0 - 57.5

D233-98 BOX N8
DEPTH- 67.0 -76.5

D233-98 BOX NO 7
DEPTH- 57.5 - 67.0

D 233-98 BOX NO 9
DEPTH- 76.5 - 86.5

105
D 233-98 BOX N011
DEPTH- 96.0 - 105.5


90
95
D 233-98 BOX N010
DEPTH- 86.5 - 96.0

D 233-98 BOX N012
DEPTH- 105.5 - 115.0
112

130
D 233-98 BOX N014
DEPTH- 124.0 - 134.0

130
D 233-98 BOX N013
DEPTH- 115.0 - 124.0

137
D 233-98 BOX N015
DEPTH- 134.0 - 144.0

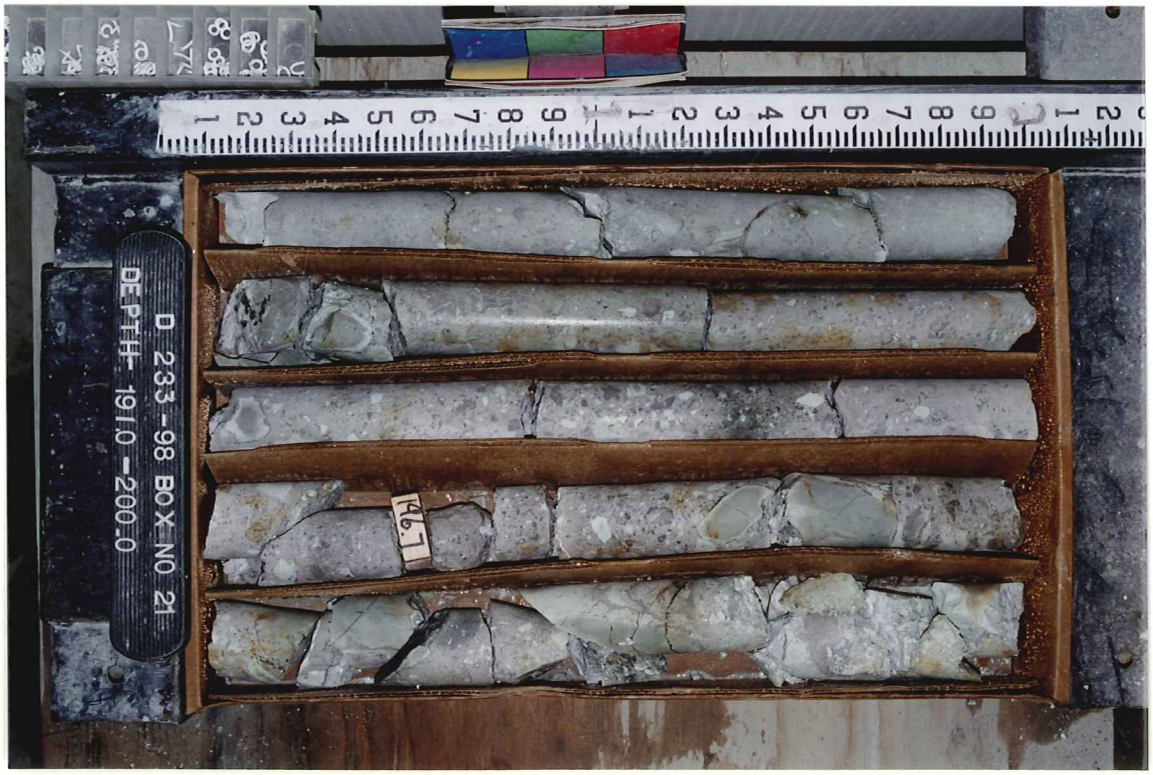
155
162
D 233-98 BOX N017
DEPTH- 153.5 - 162.0

147
D 233-98 BOX N016
DEPTH- 144.0 - 153.5

D 233-98 BOX N018
DEPTH- 162.0 - 171.5

D 233-98 BOX NO 20
DEPTH- 181.0 -191.0

D 233-98 BOX NO19
DEPTH- 171.5-181.0


D 233-98 BOX NO 21
DEPTH- 191.0 -200.0

D 233-98 BOX NO 22
DEPTH- 200.0 -207.0
PR 03