60001128

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-249-98
AUTHOR	S. King; K. Allen
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 205' receipt; handwritten notes; downhole camera images 26p. 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: mah
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

D-249-98

60001128 4010

6000 1128

Hecla MINING COMPANY

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

ROSEBUD PROJECT DIAMOND DRILL LOG

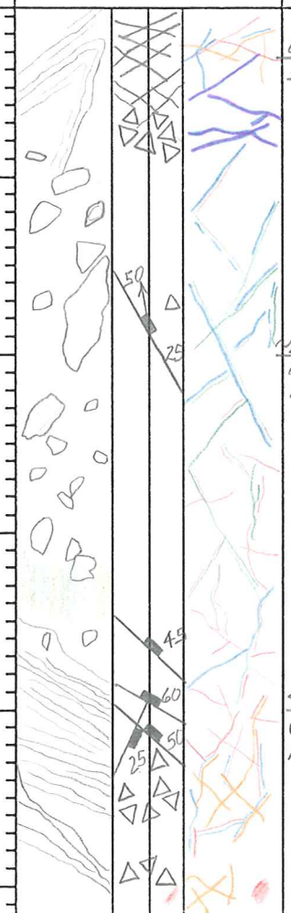
HOLE NUMBER	D-249-98	LOCATION	STOPE 13 ACCESS, SOUTH
PAGE 1 OF 4		NORTHING	
DATE	07/14/98	EASTING	
LOGGED BY	HBM	ELEVATION	
SCALE	1"=10'	AZIMUTH	N58W
TOTAL DEPTH	205'	INCLINATION	+25°

REMARKS

REC	RQD	LITHOLOGY	STRUCTURE	ALTERATION AND MINERALIZATION
0-205' PINK MATRIX BRECCIA	REDUCED	0'-40.0': LIGHT GRAY, MOTTLED, MATRIX-RICH, MATRIX-SUPPORTED MONOLITHIC BRECCIA: VARIABLY TEXTURED MASSIVE TO FLOW BANDED, VERY APHANITIC, GREY TO GREY-WHT SUB-ANGULAR ~~BRECCIA~~ FRAGMENTS. SUPPORTED BY LT. GREY COMMINUTED MATRIX & PSEUDOMATRIX PROBABLY OF THE SAME MATERIAL AS THE FRAGMENTS.	0-9.0': STR. UNHEALED BROKEN ZONE ~18-31.2': SHEAR SLICKS ON GRN CLAY COATED FRAX AT LD & TO C/A.	0-9.0': STRLY BROKEN WITH MODERATE DULL SOOTY SULFIDE +/- TRACE GREEN CLAY ON FRAX & PARTINGS, +/- SPARRY TO DUSTY CALC 9.0'-~43': WK/MOD. GRN CLAY +/- WK, DULL FG PY VNLTS. CONTINUED WK ARGILLIZATION PERVASIVE IN WALLRK. CONTINUED SPOTTY SPARRY CALCITE IN WIDER CLAY-PY VNLTS. ~31-33': PERVASIVE ARG. IN WALLROCK = MOD. 43-45': STRLY BROKEN RUBBLE COATED WITH DK GRN & LATER WHT CLAY ON FRAX, = MOD/STR. 45-48.8': SPOTTY MOD. ARGILLIZATION.
		40.0-48.0': APHANITIC FLOW UNIT (?) OR FLOW BANDED BLOCK W/IN THE PK MATRIX BXA: CONT'D LT. GREY FROM ABOVE WITH FLOW BANDING AT ~60' TO C/A.	40-48': FLAT VNTS = MOD. COMMONLY SUB // TO FLOW BANDING.	

FT 0, 10, 20, 30, 40, 50

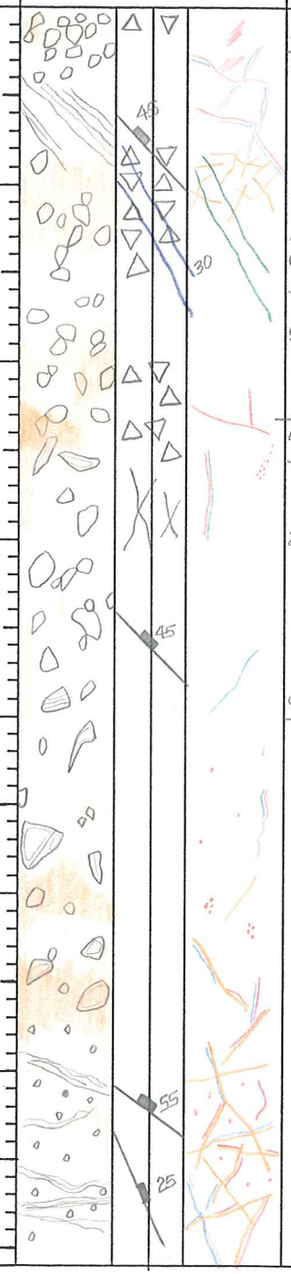
GRAPHIC LOG



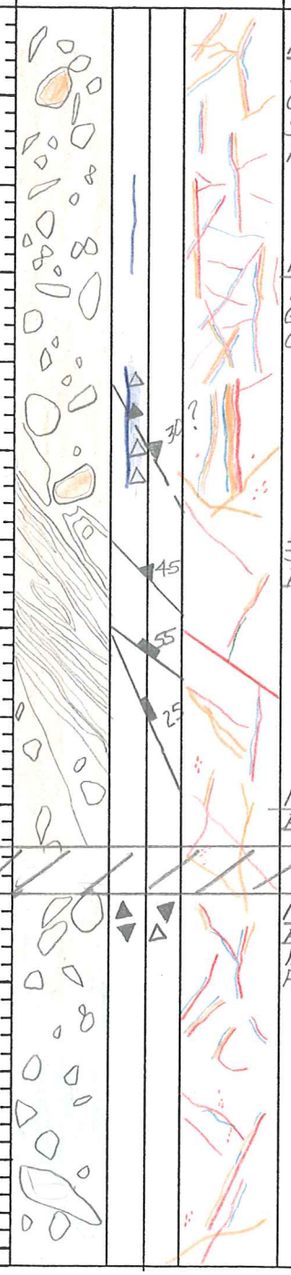
ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
0.0	4.0					
4.0	8.8					
8.8	13.5					
13.5	18.5					
18.5	23.5					
23.5	27.8					
27.8	31.2					
31.2	33.4					
33.4	38.3					
38.3	43.0					
43.0	45.0					
45.0	48.8					

HOLE NUMBER D-249-98 PAGE 2 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
0'-205' PINK MATRIX BRECCIA		48.0'-~107': LITHOLOGY CONTINUES AS DESCRIBED ON PREVIOUS PAGE; MATRIX-RICH, MATRIX-SUPPORTED BRECCIA	50		48.8-51.4': SEMI-HEALED CRACKLE BXA OVERPRINT 58.2-62.4': SEMI-HEALED CRACKLE TO RUBBLE BXA OVERPRINT. WK GRN CLY COATED SHEAR TREND AT 30° TO C/A. 62.4-73': MOD LY BROKEN 73.0-76.2': SEMI-HEALED WK CRACKLE BXA TO FRAX STOCKWORK 80-97.2': WK LY JNTED 97.2-119.6': MOD'LY BROKEN	48.8-51.4': FG PY+ CALCITE VNLTS MOD. WK DISS'D Py BLEBS. PERVASIVE ARGILLIZATION AND BLCHING = MOD. 51.4'-80': SPOTTY MOD. ARGILLIZATION & BLCHING THRU THIS OTHERWISE WKLY ALTERED INTERVAL. 58.2-62.4': MOD. WHT CLY VNLTS, WK EARLIER GRN CLY + PYRITE VNLTS 73.0-76.2': MOD. ARGILLIZATION & BLCHING. MOD. FG PY+ TR. GRN CLY ON SHEARS. 80-97.2': TR. DISS'D PY. WK PERVASIVE ARGILLIZATN & BLCHING. FROM 97.2': SPOTTY INCREASE IN PERVASIVE ARGILLIZATN TO MOD. WITH ATTENDANT INCREASE IN BLCHING 97.2'-102.3': SPOTTY MOD. ARGILLIZATN & BLCHING, WK DISS'D PY. 102.3-106.2': MOD. ARG. & BLCHING WK DISS'D PY. 106.2-119.6': WK/TR ~~DISS~~ PERVASIVE ARGILLIZATN & BLCHING. MOD. WHT CLY + WK PY ON FRAX.	48.8 58.2 62.4 68.2 73.0 76.2 80.0 86.0 92.0 97.2 102.3 106.2 110.2 114.4	51.4 58.2 62.4 68.2 73.0 76.2 80.0 86.0 92.0 97.2 102.3 106.2 110.2 114.4 119.6					
		~107-120': DISTINCTIVE, WELL-HEALED BRECCIA ZONE: THE LITHOLOGIC BRECCIA IS PARTICULARLY WELL INDURATED FINE-GRAINED AND INTERNALLY FLOW-BANDED (POSS. SEMI-WELDED) FRAGMTS TEND TO BE PEA-SIZED & ARE STRLY MATRIX-SUPPORTED IN FG, LOCALLY SHEARED OR BANDED ROCK FLOUR.										

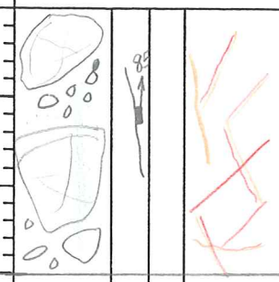
HOLE NUMBER D-249-98 PAGE 3 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0-205' PINK MATRIXED BRECCIA		120'-150.0': "TYPE" PINK MATRIXED BRECCIA: VERY APHANITIC, CRIM-COLORED, SUB-ROUND TO SUB-ANGULAR FRAGMTS FLOAT IN AN INCREASINGLY PK, COMMINUTED MATRIX & PSEUDOMATRIX OF PEA- TO FLOUR-SIZED FRAGMENTAL MAT'L. UNSORTED, STR'LY MATRIX-SUPPORTED. V. LOCAL FOLIATION. WKLY HETEROLITHIC?	120 130		119.6-~145': IRR. COATED FRAX & SHEARS SUB // TO C/A. WKLY DEVELOPED SLICKS ON LO ∠ FRAX ARE ⊥ TO THE C/A.	119.6-~145': STRONG WHT CLAY + FG DULL PYRITE/MARC +/- SPOTTY CALCITE VNLTS. TR. WAXY GRN CLY. MODLY BLCHED & ARGILLIZED WALLRK. CALCITE IN VNLTS DIES OUT BELOW FAULT @ 143'.
		150.0-160.0': LT. PINK & CRIM BANDED FLOW.	140		132.0'-133.0' & 142.0'-143': FRIABLE PK-WHT CLAY GOUGE + BLADED MARC ON LO ∠ FRAX.	FROM 135': GRADATIONAL INCREASING PINK COLOR IN MATRIX ROCK FLOUR. PK COLOR CONTINUES TO ~175'. ENDS AT RUBBLY, FAULTED ZONE.
		160.0-~169': PINK MATRIXED BRECCIA, SAME IN TEXTURE & COLOR AS THAT DESCRIBED FROM 120.0-150.0.	150		150.0-160.0': MOD/WK TINTING SUB // TO FLOW BANDING	~145'-160': MOD. THIN PYRITIC VNLTS & SPOTTY WK DISS'D AY. CONT'D WK PERVASIVE ARGILLIZATION & BLCHING
			160		166.0-167.3': STRLY BROKEN	160.0-166.0': INCREASED PY + WHT CLAY VNLTS TO MOD. CONT'D WK/TR PERVASIVE ALT'N.
						166.0-167.3': BROKEN LITTLE VNING. CONT'D FROM ABOVE
			170		LOSS	
		170.0-173.2': TAN FRAGMTS OF WALLRK IN A FAINT BRN MATRIX PROBABLY OF LATER RK FLOUR. TEXTURALLY SLIGHTLY DIFFERENT FROM LITHOLOGIC BXA ABOVE & BELOW.			170.0-173.2': TECTONIC BXA W/ ANGULAR FRAGMTS IN FAINTLY BRNISH RK FLOUR. SEMI-HEALED.	170.0-173.2': POSS. FAINT LmOx WASH IN MATRIX. MOD. WHT CLAY +/- FG Py COATS OPEN FRAX. CONT'D PERVASIVE PRIMARY WALLRK ALT'N FROM ABOVE.
		173.2-205.0': FAINT BLUE-GRN WALLRK BRECCIA WITH A TEXTURE IDENTICAL TO PINK MATRIX BXA. COBBLE-SIZED JUVENILE/DEVITRIFIED FRAGMTS IN AN INTERMITTENT RK FLOUR MATRIX. GRAIN SIZE GREATER THAN ABOVE.	180 190			173.2-205': FAINT PERVASIVE GRN CLAY ALT'N OF WALLRK MOD. THRLY WK. FRAGMTS STRLY BLCHED. MATRIX ONLY MODLY. MOD. PY +/- WHT CLAY VNLTS. NO CALCITE.

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
119.6	121.8				
121.8	126.9				
126.9	132.1				
132.1	137.0				
137.0	140.6				
140.6	142.4				
142.4	143.3				
143.3	144.9				
144.9	150.0				
150.0	155.1				
155.1	160.0				
160.0	166.0				
166.0	167.3				
170.0	173.2				
173.2	176.0				
176.0	179.9				
179.9	185.0				
185.0	189.9				

HOLE NUMBER D-249-98 PAGE 4 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0-205' PK MATRIX BXA		DESCRIPTN = P.3	190			
		TD 205'	200 210			

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
189.9	195.0				
195.0	200.0				
200.0	205.0				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-249-98 DATE: 7/14/98 LOGGED BY: HBM 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	4.0	50.0	80.0	0										
4.0	8.5	31.1	82.2	0										
8.5	12.5	85.0	97.5	57.5										
12.5	15.0	82.0	84.0	16.0										
15.0	20.0	94.0	94.0	22.0										
20.0	25.0	106.0	106.0	48.0										
25.0	30.0	96.0	96.0	30.0										
30.0	40.0	100.0	102.0	56.0										
40.0	42.0	95.0	95.0	31.0										
42.0	45.0	43.3	86.7	0										
45.0	50.0	96.0	96.0	8.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-249-98 DATE: 7/14/98 LOGGED BY: HJM 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
50.0	53.5	68.6	85.7	22.9										
53.5	60.0	55.4	75.4	20.0										
60.0	65.0	68.0	88.0	0										
65.0	73.0	66.3	87.5	16.3										
73.0	80.0	65.7	92.9	17.1										
80.0	84.5	80.0	82.2	53.3										
84.5	92.0	97.3	97.3	80.0										
92.0	100.0	96.3	96.3	77.5										
100.0	107.5	80.0	94.7	37.3										
107.5	111.5	93.0	95.0	25.0										
111.5	120.0	109.4	111.8	14.1										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-249-98 DATE: 07/14/98 LOGGED BY: ASM PAGE 3 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)
120.0	130.0	98.0	102.0	62.0										
130.0	137.0	96.0	97.1	25.7										
137.0	141.0	93.0	95.0	32.5										
141.0	150.0	102.2	102.2	50.0										
150.0	160.0	102.0	102.0	72.0										
160.0	170.0	67.0	72.0	0										
170.0	177.0	102.0	105.7	25.7										
177.0	185.0	98.8	98.8	77.5										
185.0	195.0	101.1	101.1	75.0										
195.0	205.0	103.0	103.0	54.0										
	TD													

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP049713

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-249-98 RECEIVED : 23 JUL 1998

REPORTED : 3 AUG 1998

No. SAMPLES : 49

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 SP049713

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-249-98

REPORTED : 3 AUG 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-249-98 0-4	0.006			0.13
D-249-98 4.0-8.8	0.007			1.12
D-249-98 8.8-13.5	0.029			0.13
D-249-98 13.5-18.5	0.035			0.24
D-249-98 18.5-23.5	0.004			0.04
D-249-98 23.5-27.8	0.009			0.13
D-249-98 27.8-31.2	0.006	0.006		0.08
D-249-98 31.2-33.4	0.079		0.071	0.24
D-249-98 33.4-38.3	0.024			0.09
D-249-98 38.3-43.0	0.011			0.07
D-249-98 43-45	0.045			0.26
D-249-98 45.0-48.8	0.004	0.004		0.06
D-249-98 48.8-51.4	0.017			0.13
D-249-98 51.4-58.2	0.006			0.07
D-249-98 58.2-62.4	0.004			0.08
D-249-98 62.4-68.2	0.002			0.08
D-249-98 68.2-73.0	0.002			0.07
D-249-98 73.0-76.2	0.010			0.04
D-249-98 76.2-80.0	0.009			0.06
D-249-98 80-86	<0.001			0.04
D-249-98 86-92	0.004			0.04
D-249-98 92.0-97.2	0.005			0.06
D-249-98 97.2-102.3	0.022			0.10
D-249-98 102.3-106.2	0.237		0.233	0.46
D-249-98 106.2-110.2	0.007			0.13

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP049713

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-249-98

REPORTED : 3 AUG 1998

SAMPLES		Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)	
D-249-98 110.2-114.4		0.007			0.09	
D-249-98 114.4-119.6		0.002			0.05	
D-249-98 119.6-121.8		0.043			10.36	
D-249-98 121.8-126.9		0.006			0.16	
D-249-98 126.9-132.1		0.004			0.12	
D-249-98 132.1-137.0		0.037			0.61	
D-249-98 137.0-140.6		0.006			0.20	
D-249-98 140.6-142.4		0.007			0.22	
D-249-98 142.4-143.3		0.029			0.38	
D-249-98 143.3-144.9		0.006			0.14	
D-249-98 144.9-150.0		0.002			0.12	
D-249-98 150.0-155.1		<0.001			0.04	
D-249-98 155.1-160.0		0.003			0.21	166-173.2
D-249-98 160-166		0.009			0.73	=7.2' @
D-249-98 166.0-167.3	1.3	0.316		0.348	0.76	0.246 Au
D-249-98 170.0-173.2	3.2	0.217		0.234	0.40	0.50 Ag
D-249-98 173.2-176.0	2.8	0.030			0.17	
D-249-98 176.0-179.9		0.023			0.08	
D-249-98 179.9-185.0		0.027			0.15	
D-249-98 185.0-189.9		0.032			0.11	
D-249-98 189.9-195.0		0.006			0.09	
D-249-98 195-200		0.008			0.11	
D-249-98 200-205		0.014			0.09	
34474		0.529			5.05	

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

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Mazatlan Office
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011-52-69-170035

Other Offices
Lima, Peru
Santiago, Chile
Mendoza, Argentina

Company: ROSEBUD MINING CO LLC

Address: P.O. BOX 2610

City WINNEMUCCA State NV Zip ~~89820~~ 89446

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

Project Name: DEVELOPMENT Purchase Order Number:

Date Submitted: 1/22/99 Number of Samples: 49

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

D-249-98 SAMPLE IDENTIFICATION			TYPE	ELEMENTS REQUIRED
0-4	59.2-62.4	126.9-132.1	CORE	Au-Ag ACCORDING TO
4-9.4	62.4-66.2	132.1-137		ROSEBUD MINE
9.4-13.5	66.2-73	137-140.6		PROTOCOLS
13.5-18.5	73-76.2	140.6-142.4		
18.5-23.5	76.2-80	142.4-143.3		185-189.9
23.5-27.6	80-86	143.3-144.9		189.9-195
27.6-31.2	86-92	144.9-150		195-200
31.2-33.4	92-97.2	150-155.1		200-205
33.4-38.3	97.2-102.3	155.1-160		
38.3-43	102.3-106.2	160-166		
43-45	106.2-110.2	166-167.3		
45-48.8	110.2-114.4	170-173.2		
~~51.4~~	114.4-119.6	173.2-176		
48.8-51.4	119.6-121.4	176-179.9		
51.4-56.5	121.4-126.9	179.9-185		

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

INVOICE

Remit To: P.O. Box11530
Reno, Nevada 89510
Phone NO.: 702-356-0606
Fax No.: 702-356-1413

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1500 GLENDALE AVE.
SPARKS, NV 89431-5902

(702) 356-0606

INVOICE NO: SP 0049713-IN
INVOICE DATE: 08/04/98

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-249-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
49	SAMPLES RECEIVED	.00	.00
48	JAW CRUSHING CHARGE	1.30	62.40
48	COARSE MILLING CHARGE	4.50	216.00
48	SPLITTING CHARGE	2.40	115.20
48	RING MILLING CHARGE	2.00	96.00
49	Au (1 A.T. FIRE ASSAY)	8.00	392.00
4	Au ANALYSES/GRAVIMETRIC	8.75	35.00
49	HYDROCHLORIC/NITRIC DIGESTION	2.00	98.00
49	Ag ANALYSES	1.00	49.00
1	Ag (ore grade) ANALYSES	5.00	5.00

4200-[illegible] 13-9999-477
RA

NET INVOICE:	1,068.60
LESS DISCOUNT:	213.72
FREIGHT:	.00
INVOICE TOTAL:	854.88

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP049713

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-249-98 RECEIVED : 23 JUL 1998

No. SAMPLES : 49 REPORTED : 3 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 SP049713

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-249-98

REPORTED : 3 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-249-98 0-4	0.006			0.13
D-249-98 4.0-8.8	0.007			1.12
D-249-98 8.8-13.5	0.029			0.13
D-249-98 13.5-18.5	0.035			0.24
D-249-98 18.5-23.5	0.004			0.04
D-249-98 23.5-27.8	0.009			0.13
D-249-98 27.8-31.2	0.006	0.006		0.08
D-249-98 31.2-33.4	0.079		0.071	0.24
D-249-98 33.4-38.3	0.024			0.09
D-249-98 38.3-43.0	0.011			0.07
D-249-98 43-45	0.045			0.26
D-249-98 45.0-48.8	0.004	0.004		0.06
D-249-98 48.8-51.4	0.017			0.13
D-249-98 51.4-58.2	0.006			0.07
D-249-98 58.2-62.4	0.004			0.08
D-249-98 62.4-68.2	0.002			0.08
D-249-98 68.2-73.0	0.002			0.07
D-249-98 73.0-76.2	0.010			0.04
D-249-98 76.2-80.0	0.009			0.06
D-249-98 80-86	<0.001			0.04
D-249-98 86-92	0.004			0.04
D-249-98 92.0-97.2	0.005			0.06
D-249-98 97.2-102.3	0.022			0.10
D-249-98 102.3-106.2	0.237		0.233	0.46
D-249-98 106.2-110.2	0.007			0.13

AMERICAN ASSAY LABORATORIES

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PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-249-98

REPORTED : 3 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-249-98 110.2-114.4	0.007			0.09
D-249-98 114.4-119.6	0.002			0.05
D-249-98 119.6-121.8	0.043			10.36
D-249-98 121.8-126.9	0.006			0.16
D-249-98 126.9-132.1	0.004			0.12
D-249-98 132.1-137.0	0.037			0.61
D-249-98 137.0-140.6	0.006			0.20
D-249-98 140.6-142.4	0.007			0.22
D-249-98 142.4-143.3	0.029			0.38
D-249-98 143.3-144.9	0.006			0.14
D-249-98 144.9-150.0	0.002			0.12
D-249-98 150.0-155.1	<0.001			0.04
D-249-98 155.1-160.0	0.003			0.21
D-249-98 160-166	0.009			0.73
D-249-98 166.0-167.3	0.316		0.348	0.76
D-249-98 170.0-173.2	0.217		0.234	0.40
D-249-98 173.2-176.0	0.030			0.17
D-249-98 176.0-179.9	0.023			0.08
D-249-98 179.9-185.0	0.027			0.15
D-249-98 185.0-189.9	0.032			0.11
D-249-98 189.9-195.0	0.006			0.09
D-249-98 195-200	0.008			0.11
D-249-98 200-205	0.014			0.09
34474	0.529			5.05

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COPIES TO : KURT ALLEN
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CLIENT REFERENCE No: D-249-98 RECEIVED : 23 JUL 1998

No. SAMPLES : 49 REPORTED : 3 AUG 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
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ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
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Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP049713

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-249-98

REPORTED : 3 AUG 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-249-98 0-4	0.006			0.13
D-249-98 4.0-8.8	0.007			1.12
D-249-98 8.8-13.5	0.029			0.13
D-249-98 13.5-18.5	0.035			0.24
D-249-98 18.5-23.5	0.004			0.04
D-249-98 23.5-27.8	0.009			0.13
D-249-98 27.8-31.2	0.006	0.006		0.08
D-249-98 31.2-33.4	0.079		0.071	0.24
D-249-98 33.4-38.3	0.024			0.09
D-249-98 38.3-43.0	0.011			0.07
D-249-98 43-45	0.045			0.26
D-249-98 45.0-48.8	0.004	0.004		0.06
D-249-98 48.8-51.4	0.017			0.13
D-249-98 51.4-58.2	0.006			0.07
D-249-98 58.2-62.4	0.004			0.08
D-249-98 62.4-68.2	0.002			0.08
D-249-98 68.2-73.0	0.002			0.07
D-249-98 73.0-76.2	0.010			0.04
D-249-98 76.2-80.0	0.009			0.06
D-249-98 80-86	<0.001			0.04
D-249-98 86-92	0.004			0.04
D-249-98 92.0-97.2	0.005			0.06
D-249-98 97.2-102.3	0.022			0.10
D-249-98 102.3-106.2	0.237		0.233	0.46
D-249-98 106.2-110.2	0.007			0.13

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP049713

American Assay Laboratories

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PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-249-98

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SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-249-98 110.2-114.4	0.007			0.09
D-249-98 114.4-119.6	0.002			0.05
D-249-98 119.6-121.8	0.043			10.36
D-249-98 121.8-126.9	0.006			0.16
D-249-98 126.9-132.1	0.004			0.12
D-249-98 132.1-137.0	0.037			0.61
D-249-98 137.0-140.6	0.006			0.20
D-249-98 140.6-142.4	0.007			0.22
D-249-98 142.4-143.3	0.029			0.38
D-249-98 143.3-144.9	0.006			0.14
D-249-98 144.9-150.0	0.002			0.12
D-249-98 150.0-155.1	<0.001			0.04
D-249-98 155.1-160.0	0.003			0.21
D-249-98 160-166	0.009			0.73
D-249-98 166.0-167.3	0.316		0.348	0.76
D-249-98 170.0-173.2	0.217		0.234	0.40
D-249-98 173.2-176.0	0.030			0.17
D-249-98 176.0-179.9	0.023			0.08
D-249-98 179.9-185.0	0.027			0.15
D-249-98 185.0-189.9	0.032			0.11
D-249-98 189.9-195.0	0.006			0.09
D-249-98 195-200	0.008			0.11
D-249-98 200-205	0.014			0.09
34474	0.529			5.05

15'
12.5
D 249 -98 BOX NO 2
DEPTH- 9.5-19.5

4'
8.5
D 249 -98 BOX NO 1
DEPTH- 0.0- 9.5

20
25'
D 249 -98 BOX NO 3
DEPTH- 19.5-29.0

D 249 -98 BOX NO5
DEPTH- 38.5 - 48.0

D 249 -98 BOX NO4
DEPTH- 29.0 - 38.5

D 249 -98 BOX NO 6
DEPTH- 48.0 - 57.5

D 249 -98 BOX NO 8
DEPTH - 68.5 - 78.5

D 249 -98 BOX NO 7
DEPTH - 57.5 - 68.5

D 249 -98 BOX NO 9
DEPTH - 78.5 - 89.0

100
110.5
D 249 -98 BOX NO 11
DEPTH - 98.5 - 108.0

D 249 -98 BOX NO 10
DEPTH - 89.0 - 98.5

D 249 -98 BOX NO 12
DEPTH - 108.0 - 117.5
115

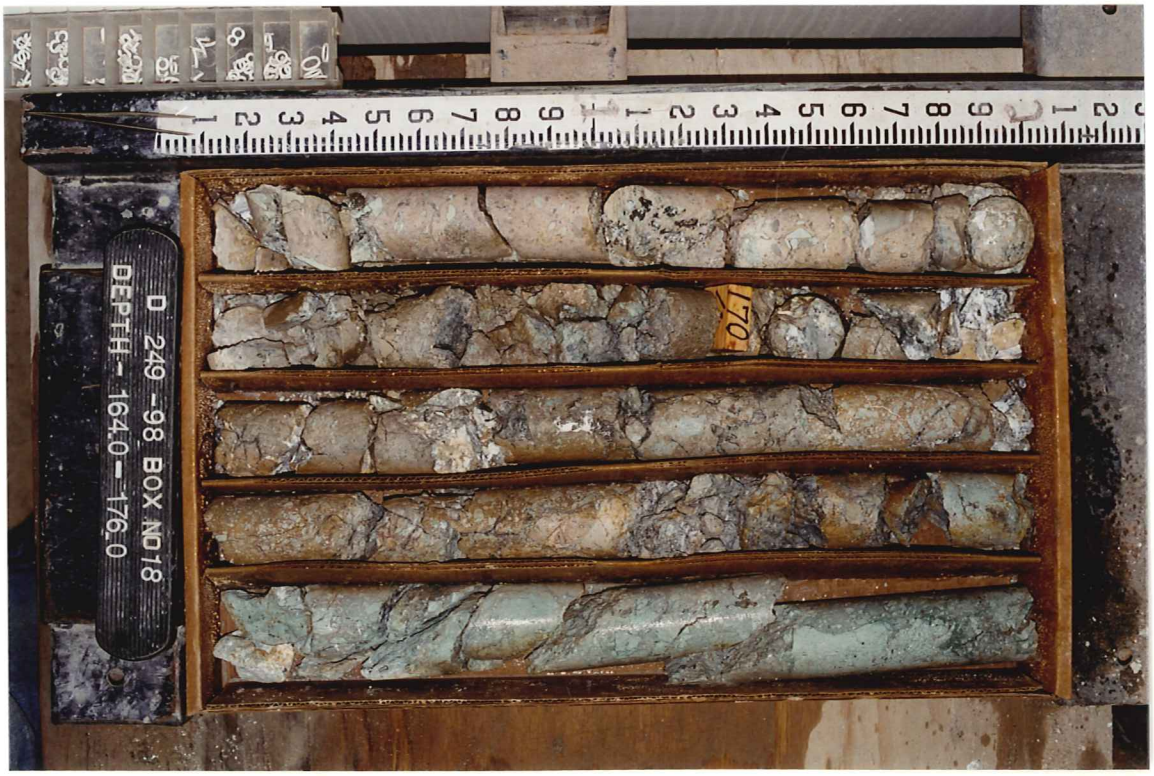
D 249 -98 BOX NO 14
DEPTH - 126.0 - 135.5

120
D 249 -98 BOX NO 13
DEPTH - 117.5 - 126.0

137
141
D 249 -98 BOX NO 15
DEPTH - 135.5 - 145.0

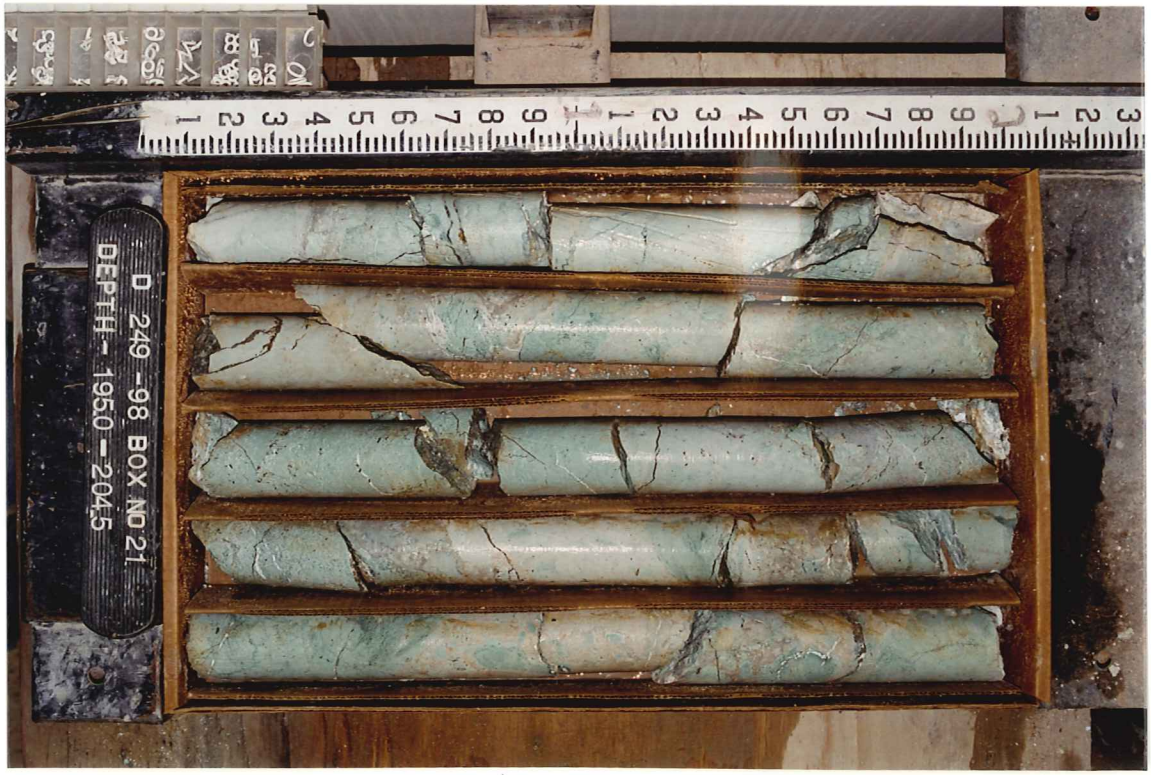
160
D 249 -98 BOX NO17
DEPTH- 154.5- 164.0

150
D 249 -98 BOX NO 16
DEPTH- 145.0- 154.5


170
D 249 -98 BOX NO18
DEPTH- 164.0- 176.0

D 249 -98 BOX NO20
DEPTH - 185.5 - 195.0

177
185
D 249 -98 BOX NO19
DEPTH - 176.0 - 185.5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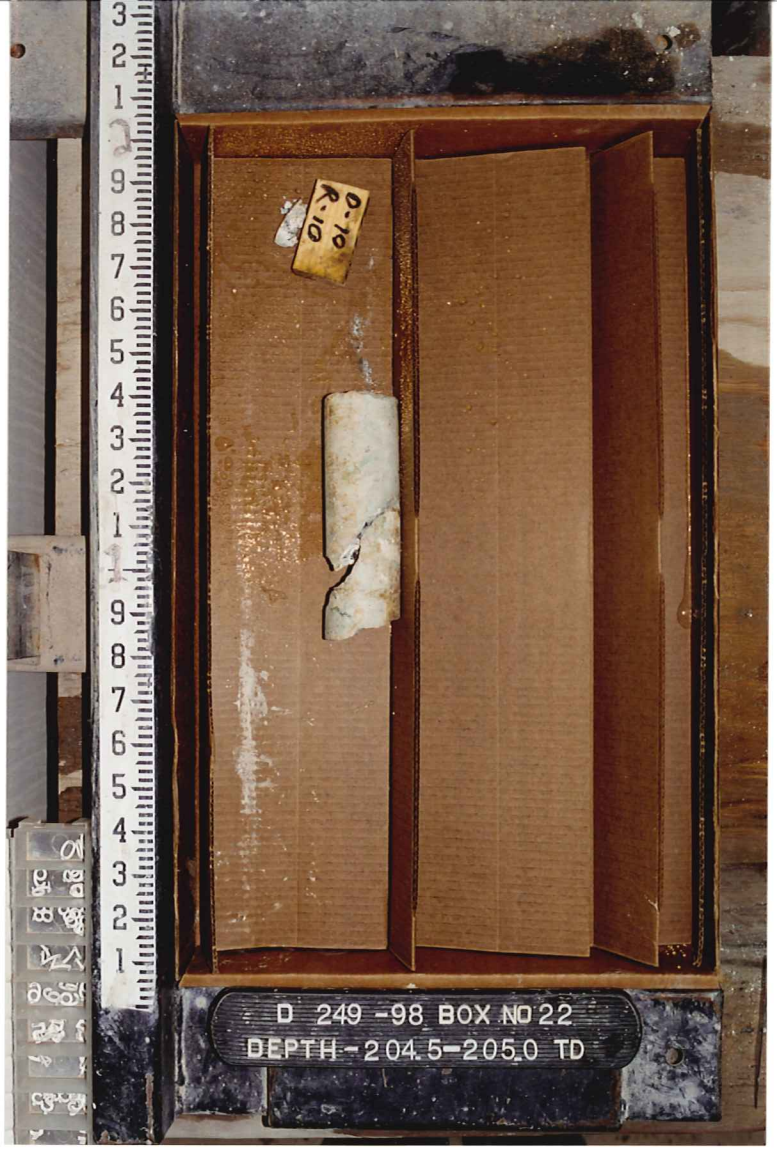
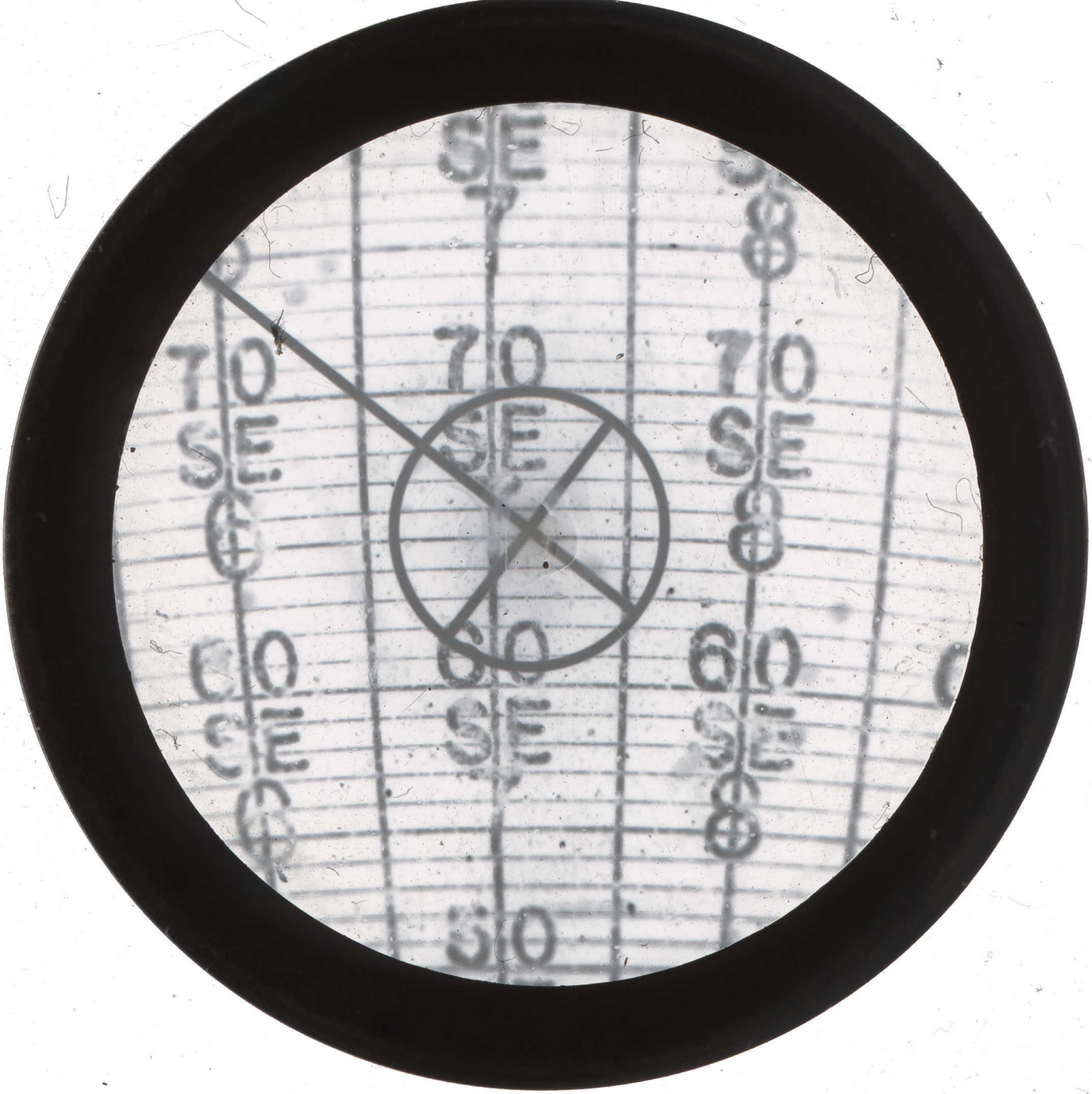
DEPTH - 195.0 - 204.5


D 249 -98 BOX NO 22
DEPTH - 204.5-205.0 TD

SINGLE SHOT
PHOTO DISC RECORD

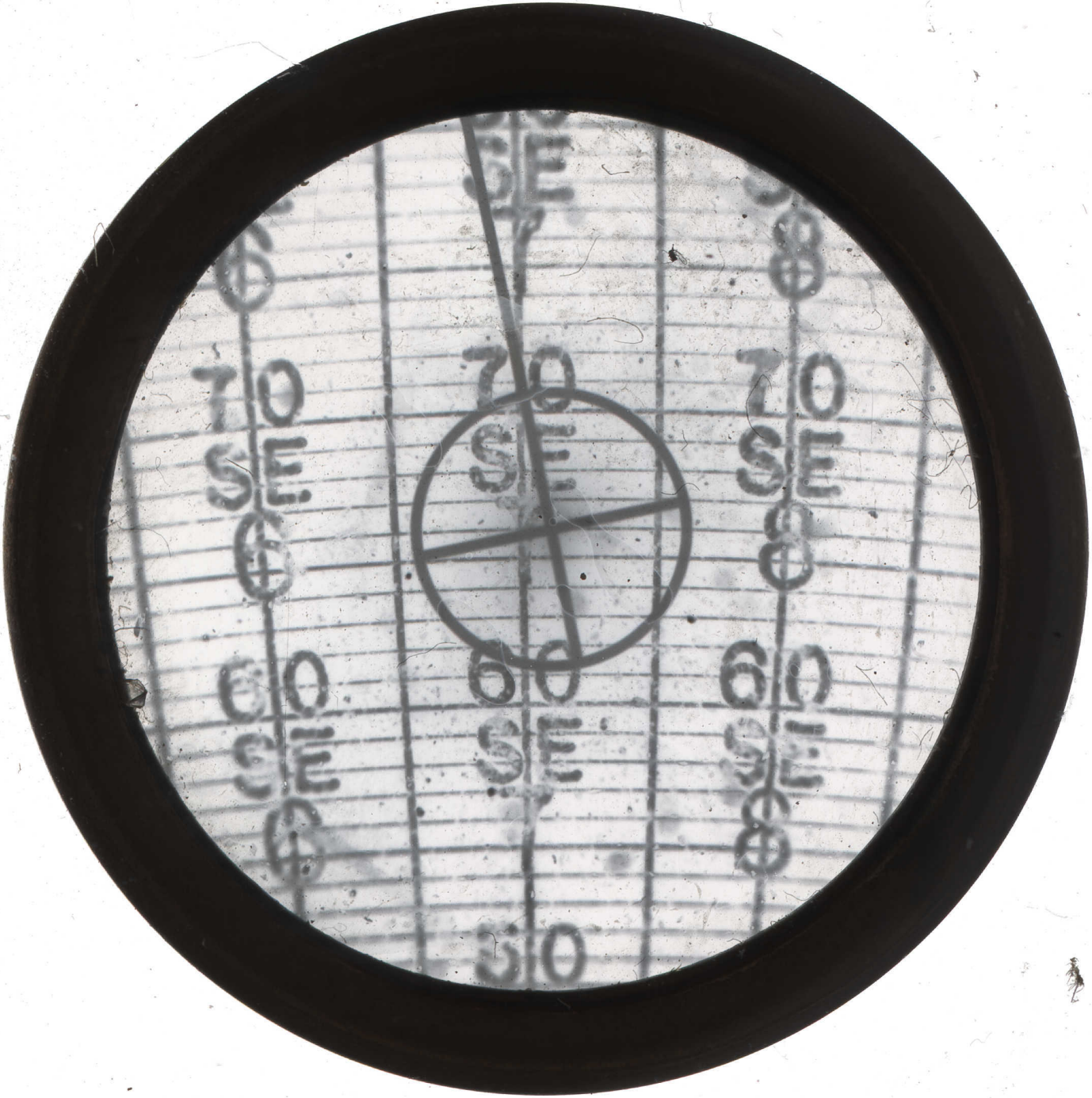
COMPANY Hecla
WELL NAME D-24-98
LEASE
TAKEN BY Hunter,
DEPTH Collar
DATE 5-1-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO. 1

HI-1408


SE
70
SE
60
SE
50

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-24B-98
LEASE
TAKEN BY Hunter
DEPTH 100'
DATE 5-1-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO. 1
HI-1408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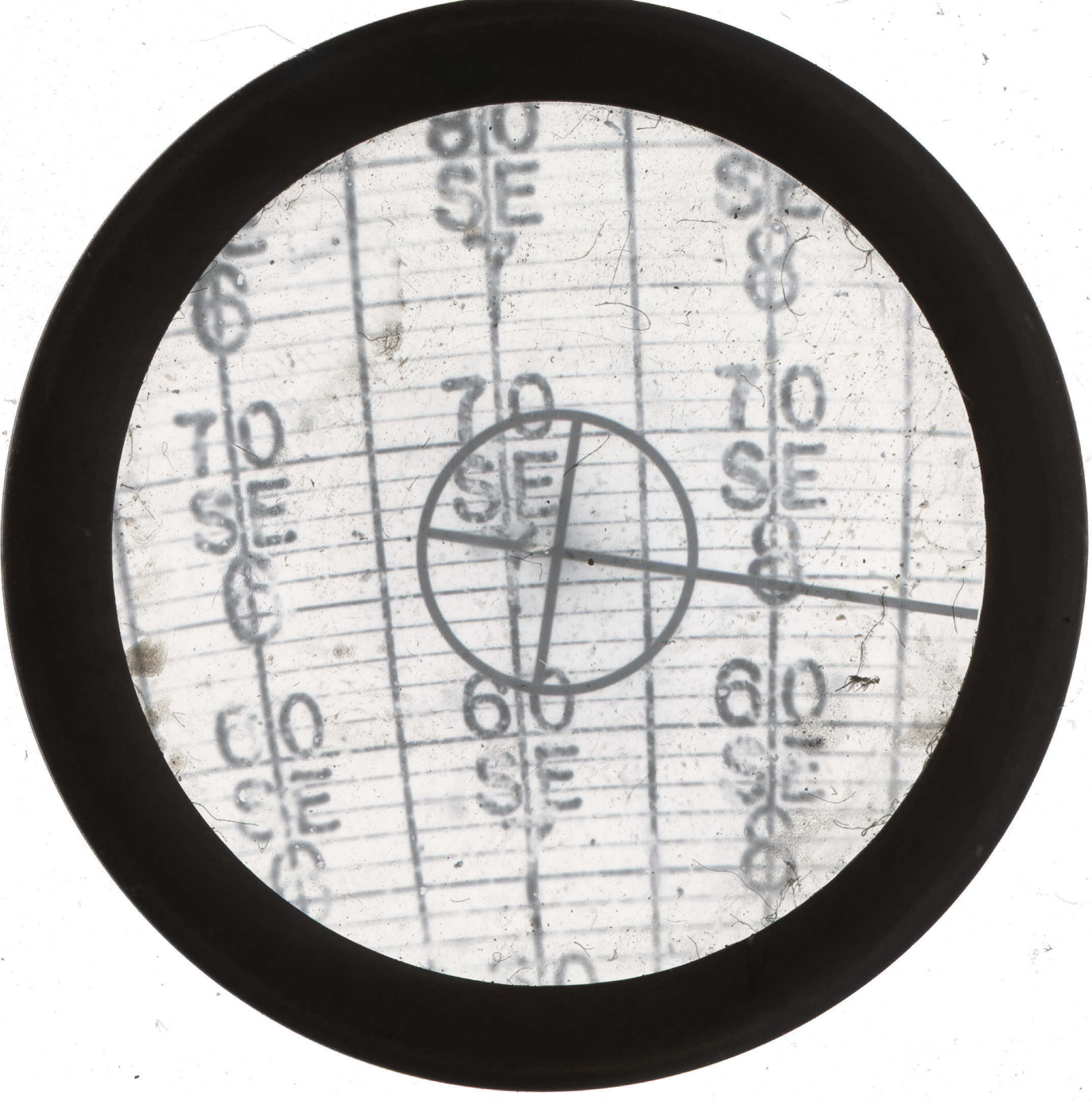
SE
60
SE
70
SE
60
SE
70
SE
60
SE
50

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Heck
WELL NAME D-249-98
LEASE
TAKEN BY Hunter
DEPTH 200
DATE 5-1-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO. 1

HI-1408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