60001218

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-318-98
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 200' 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: DD 5/14/08
Initials Date
DB: mah
Initials Date
SCANNED: NB
Initials Date

Revised: 1/22/08

D - 318 - 98

60001218 4010

6000 1218

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-318-98	LOCATION	STOPE 50 NORTH SEC 1675	REMARKS	
PAGE 1 OF 4		NORTHING			
DATE	11/2-3/98	EASTING			
LOGGED BY	ALLYN NILES	ELEVATION			
SCALE	1"=10'	AZIMUTH	125		
TOTAL DEPTH	200'	INCLINATION	48		

LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0.0 – 26.0 PLANAR LAMINAR		0.0 – 26.0 PINKISH → GREEN, FINE GRAIN FLOW W/ FLOW BANDS & RARE VESICLE TRAINS. LAMINAR PARTINGS ALONG PLANAR FEATURES	10	55, 60, 30, 40, 65, 40	0.0 – 26.0 FRACTURES COMMON, USUALLY AT LOW ANGLE TO CORE, LOW RQD. 0.0 – 115 VEINS RARE	0.0 – 68.0 MINOR CALCITE VEINE W/ PYRITE. 0.0 – 115 VEINS FILLED W/ GREEN CLAY, QUARTZ, CALCITE, PYRITE.
26.0 – 30.5 SPOTTED FLOW		26.0 – 30.5 STRONGLY RESEMBLES LST/SPOTTED TOFF. IRREGULAR VESICLES IN GREEN FG. VOLCANIC CLAY	20	12	26.0 – 28.0 VUGS ASSOC. W/ ARGILLIC ALT. 26.0 GRADATIONAL CONTACT	26.0 – 28.0 VUGS LINED W/ DRUZY QUARTZ, MINOR PYRITE.
30.5 – 40.0 F.G. MASSIVE		30.5 – 40.0 GREEN. VERY FINE GRAIN W/ PINK SPIDER WEB PATTERN.	30	30, 60, 40	30.5 GRADATIONAL CONTACT 37.0 1/2" ø VEIN	37.0 VEIN FILLED W/ WHITE CLAY + QUARTZ, PYRITE
40.0 – 78.0 VITROPHYRE		40.0 – 78.0 PIMA → GREEN, EXTREEMLY FINE GRAIN W/ PERLITIC/CRACKED GLASS DEVIT. FRACTURE PATTERN.	40	40, 29	40.0 GRADATIONAL CONTACT 40.8 – 41.8 THICK VEIN, AT LOW ANGLE TO CORE. ACTUALLY ~ 3" ø 42.0 – 115 NATURAL FRACTURES RARE, HIGH RQD	40.8 – 41.8 MIXED WHITE CLAY & QUARTZ INTERIOR W/ MINOR BLADED MARC. QUARTZ (DK. GRAY) RIND ALSO W/ PYRITE.
			50			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	A
0.0	5.0					
5.0	10.0					
10.0	15.0					
15.0	20.0					
20.0	26.0					
26.0	30.0					
30.0	35.8					
35.8	39.0					
39.0	42.0					
42.0	47.0					

HOLE NUMBER D-318-98 PAGE 2 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
40.0 – 78.0 VITROPHYRE		40.0 – 78.0 SEE DESCRIPTION PAGE 1.	60, 70, 80, 90, 100, 110, 120		77.0 – 78.0 VUGS ASSOC. W/ LEACHED VEINS. 78.0 GRADATIONAL CONTACT	77.0 – 78.0 MOD → STRONG VEINING/VUGS, VEINS FILLED W/ QUARTZ & PYRITE. VUGS LINED W/ DRUZY QTZ. & MINOR PYRITE.
78.0 – 106.2 F.G. MASSIVE		78.0 – 98.0 GREEN, VERY FINE GRAIN, DEVOID OF INTERNAL FABRIC.				
		98.0 – 106.2 GRADING INTO AUTO BXA THEN TO VITROPHYRE-LIKE CHILLED MARGIN. BXA CLASTS ARE ROUND → SUBANGULAR & ARE VITROPHYRE-LIKE IN A VERY FINE GRAIN MASSIVE MATRIX.			93.0 – 96.0 1/2" Ø VEIN, NEAR 0° TO CORE	93.0 – 115 CALCITE W/ GREEN CLAY OR QUARTZ & PYRITE FAIRLY COMMON. 93.0 – 96.0 VEIN FILLED W/ QUARTZ, CALCITE PYRITE.
106.2 – 142.6 PLANAR LAMINAR		106.2 – 122.0 PURPLE, FINE GRAIN FLOW W/ COMMON PLANAR FLOW BANDS.			106.2 CONTACT SHARP	
					115.3 – 118.0 VEIN AT LOW ANGLE TO CORE	115.3 – 118.0 VEIN FILLED W/ QUARTZ, DRUZY QUARTZ IN VUGS, CALCITE, PYRITE

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
47.0	51.0				
51.0	55.0				
55.0	60.0				
60.0	65.0				
65.0	70.0				
70.0	75.0				
75.0	80.0				
80.0	85.0				
85.0	90.0				
90.0	92.5				
92.5	96.0				
96.0	100.0				
100.0	105.0				
105.0	110.0				
110.0	115.0				
115.0	117.5				
117.5	119.5				

KELLY SHEPARD

HOLE NUMBER D-318-98 PAGE 3 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
106.2 – 142.6 PLANAR LAMINAR		106.2 – 127.0 SEE DESCRIPTION PAGE 2. 127.0 – 142.6 PURPLE, FINE GRAIN PLANAR, MOD. LAMINAR FLOW	130 140		118.0 – 125.0 SEVERAL THIN VEINS AT LOW ∡ TO CORE. 123.0 – 125.0 AUTO BXA W/ GREEN CLASTS IN PURPLE CLAY. 127.0 – 142.6 MOD FRACTURES, MOSTLY LAMINAR OR SUB-LAMINAR. NOTE ALL SAMPLE BREAKS PAST 125' ARE ON LITH CONTACTS OR DRILLER BLOCKS.	118.0 – 125.0 VEINS FILLED W/ CALCITE, QUARTZ & PYRITE. 127.0 – 142.6 FRACTS FILLED W/ WHITE TO PURPLE CALCITE, RARE PYRITE.
142.6 – 152.2 SPOTTED TUFF		142.6 – 152.2 SPOTTED TUFF. LT GREEN W/ FAINT PURPLE BANDS, FINE GRAIN W/ ROUND → IRREGULAR VESICLES OFTEN FILLED W/ DK. BROWN OR GREEN CLAY.	150		142.6 GRADATIONAL CONTACT. 142.6 – 200.0 MINOR → RARE FRACTS. 152.2 GRADATIONAL CONTACT	142.6 – 200.0 FRACTURES FILLED W/ CALCITE AND/OR LT. GREEN HARD CLAY, VERY MINOR PYRITE.
152.2 – 168.0 PLANAR LAMINAR		152.2 – 168.0 GREEN TO DK. PURPLE; FINE GRAIN PLANAR FLOW W/ LAMINAR PARTINGS.	160			
168.0 – 192.0 F.G. MASSIVE?		168.0 – 172.5 GREEN → DK. GREEN, VERY FINE GRAIN FLOW W/ RARE PLANAR LINAMENTS. 172.5 – 192.0 SPECKLED FLOW? ABUNDANT SMALL, ROUNDED SPECKS IN A PURPLE VOLCANIC CLAY, VERY RARE BANDS AS FABRIC ALIGNMENTS.	170 180 190		168.0 GRADATIONAL CONTACT W/ AUTO BXA. 186. – 189.0 AUTO BXA, ROUND, GREEN FRAGS IN PURPLE VOLCANIC CLAY	

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
119.5	121.5				
121.5	125.0				
125.0	130.0				
130.0	135.0				
135.0	138.0				
138.0	142.6				
142.6	145.0				
145.0	150.0				
150.0	153.0				
153.0	156.0				
156.0	160.0				
160.0	165.0				
165.0	168.0				
168.0	170.0				
170.0	175.0				
175.0	180.0				
180.0	185.0				
185.0	190.0				

HOLE NUMBER D-318-98 PAGE 4 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
168.0 - 192.0		F.G. MASSIVE?			192.0 GRADATIONAL CONTACT		190.0	192.0				
192.0 - 200.0		192.0 - 200.0										
PLANAR LAMINAR		VERY FINE GRAIN, GREEN W/ PURPLE BANDS					192.0	195.0				
			200				195.0	200.0				
		T.D. 200'										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-318-98 DATE: 11/2/98 LOGGED BY: ALLYN NILES 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	5.0	72.0	100.0	36.0										
5.0	10.0	92.0	92.0	44.0										
10.0	15.0	100.0	100.0	54.0										
15.0	20.0	88.0	96.0	64.0										
20.0	22.0	0	75.0	0										
22.0	26.0	0	110.0	0										
26.0	30.0	45.0	92.5	22.5										
30.0	39.0	75.5	103.3	68.8										
39.0	47.0	95.0	100.0	82.5										
47.0	55.0	100.0	100.0	100.0										
55.0	65.0	99.0	100.0	88.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-318-98 DATE: LOGGED BY: 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)
65.0	75.0	100.0	100.0	93.0										
75.0	85.0	86.0	105.0	90.0										
85.0	95.0	100.0	100.0	96.0										
95.0	105.0	105.0	105.0	100.0										
105.0	115.0	105.0	105.0	41.0										
115.0	125.0	100.0	100.0	69.0										
125.0	135.0	90.0	100.0	26.0										
135.0	142.0	100.0	100.0	57.1										
142.0	150.0	107.5	107.5	107.5										
150.0	160.0	100.0	100.0	91.0										
160.0	170.0	100.0	100.0	97.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-318-98 DATE: 11/2/98 LOGGED BY: ALLYN NILES 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)
170.0	180.0	100.0	100.0	100.0										
180.0	190.0	100.0	100.0	90.0										
190.0	200.0	100.0	100.0	85.0										

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 0051540-IN
INVOICE DATE: 11/23/98

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-318-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
49	SAMPLES RECEIVED	.00	.00
48	DRYING	1.00	48.00
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
1	AU ANALYSES/GRAVIMETRIC	8.75	8.75
49	HYDROCHLORIC/NITRIC DIGESTION	2.00	98.00
49	Ag ANALYSES	1.00	49.00

86-5110-477
Ad

NET INVOICE:	1,085.35
LESS DISCOUNT:	217.07
FREIGHT:	.00
INVOICE TOTAL:	868.28

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051540

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-318-98 RECEIVED : 12 NOV 1998

No. SAMPLES : 49 REPORTED : 23 NOV 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 SP051540

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-318-98

REPORTED : 23 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-318-98 00-05	<0.001			<0.02
D-318-98 05-10	<0.001			<0.02
D-318-98 10-15	<0.001			<0.02
D-318-98 15-20	0.001			0.04
D-318-98 20-26	<0.001			<0.02
D-318-98 26-30	<0.001			0.02
D-318-98 30.0-35.8	<0.001			<0.02
D-318-98 35.8-39.0	0.221		0.298	0.61
D-318-98 39-42	0.040			0.03
D-318-98 42-47	<0.001			<0.02
D-318-98 47-51	0.003			<0.02
D-318-98 51-55	<0.001			<0.02
D-318-98 55-60	<0.001			<0.02
D-318-98 60-65	<0.001			<0.02
D-318-98 65-70	<0.001			<0.02
D-318-98 70-75	0.001			0.03
D-318-98 75-80	0.004			0.06
D-318-98 80-85	<0.001			<0.02
D-318-98 85-90	<0.001			<0.02
D-318-98 90.0-92.5	<0.001			<0.02
D-318-98 92.5-96.0	0.008	0.005		0.04
D-318-98 96-100	<0.001			<0.02
D-318-98 100-105	<0.001			<0.02
D-318-98 105-110	<0.001			<0.02
D-318-98 110-115	<0.001			<0.02

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ANALYSIS REPORT SP051540

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-318-98

REPORTED : 23 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-318-98 115.0-117.5	0.001			0.04
D-318-98 117.5-119.5	<0.001			0.03
D-318-98 119.5-121.5	0.001			0.02
D-318-98 121.5-125.0	0.006			0.02
D-318-98 125-130	<0.001			<0.02
D-318-98 130-135	<0.001			<0.02
D-318-98 135-138	<0.001			<0.02
D-318-98 138.0-142.6	<0.001			<0.02
D-318-98 142.6-145.0	<0.001			<0.02
D-318-98 145-150	<0.001			<0.02
D-318-98 150-153	<0.001			<0.02
D-318-98 153-156	<0.001			<0.02
D-318-98 156-160	<0.001			<0.02
D-318-98 160-165	<0.001			<0.02
D-318-98 165-168	<0.001			<0.02
D-318-98 168-170	<0.001			<0.02
D-318-98 170-175	<0.001			<0.02
D-318-98 175-180	<0.001			0.03
D-318-98 180-185	<0.001			<0.02
D-318-98 185-190	<0.001			0.05
D-318-98 190-192	<0.001			<0.02
D-318-98 192-195	<0.001			<0.02
D-318-98 195-200	<0.001			<0.02
46590	0.547			2.77

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051540

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-318-98 RECEIVED : 12 NOV 1998

No. SAMPLES : 49 REPORTED : 23 NOV 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
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 SP051540

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-318-98

REPORTED : 23 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-318-98 00-05	<0.001			<0.02
D-318-98 05-10	<0.001			<0.02
D-318-98 10-15	<0.001			<0.02
D-318-98 15-20	0.001			0.04
D-318-98 20-26	<0.001			<0.02
D-318-98 26-30	<0.001			0.02
D-318-98 30.0-35.8	<0.001			<0.02
D-318-98 35.8-39.0	0.221		0.298	0.61
D-318-98 39-42	0.040			0.03
D-318-98 42-47	<0.001			<0.02
D-318-98 47-51	0.003			<0.02
D-318-98 51-55	<0.001			<0.02
D-318-98 55-60	<0.001			<0.02
D-318-98 60-65	<0.001			<0.02
D-318-98 65-70	<0.001			<0.02
D-318-98 70-75	0.001			0.03
D-318-98 75-80	0.004			0.06
D-318-98 80-85	<0.001			<0.02
D-318-98 85-90	<0.001			<0.02
D-318-98 90.0-92.5	<0.001			<0.02
D-318-98 92.5-96.0	0.008	0.005		0.04
D-318-98 96-100	<0.001			<0.02
D-318-98 100-105	<0.001			<0.02
D-318-98 105-110	<0.001			<0.02
D-318-98 110-115	<0.001			<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT $P051540

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-318-98

REPORTED : 23 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-318-98 115.0-117.5	0.001			0.04
D-318-98 117.5-119.5	<0.001			0.03
D-318-98 119.5-121.5	0.001			0.02
D-318-98 121.5-125.0	0.006			0.02
D-318-98 125-130	<0.001			<0.02
D-318-98 130-135	<0.001			<0.02
D-318-98 135-138	<0.001			<0.02
D-318-98 138.0-142.6	<0.001			<0.02
D-318-98 142.6-145.0	<0.001			<0.02
D-318-98 145-150	<0.001			<0.02
D-318-98 150-153	<0.001			<0.02
D-318-98 153-156	<0.001			<0.02
D-318-98 156-160	<0.001			<0.02
D-318-98 160-165	<0.001			<0.02
D-318-98 165-168	<0.001			<0.02
D-318-98 168-170	<0.001			<0.02
D-318-98 170-175	<0.001			<0.02
D-318-98 175-180	<0.001			0.03
D-318-98 180-185	<0.001			<0.02
D-318-98 185-190	<0.001			0.05
D-318-98 190-192	<0.001			<0.02
D-318-98 192-195	<0.001			<0.02
D-318-98 195-200	<0.001			<0.02
46590	0.547			2.77

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP051540

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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-318-98 RECEIVED : 12 NOV 1998

No. SAMPLES : 49 REPORTED : 23 NOV 1998

MAIN SAMPLE TYPE : DRILL CORE

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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 SP051540

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-318-98

REPORTED : 23 NOV 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-318-98 00-05	<0.001			<0.02
D-318-98 05-10	<0.001			<0.02
D-318-98 10-15	<0.001			<0.02
D-318-98 15-20	0.001			0.04
D-318-98 20-26	<0.001			<0.02
D-318-98 26-30	<0.001			0.02
D-318-98 30.0-35.8	<0.001			<0.02
D-318-98 35.8-39.0	0.221		0.298	0.61
D-318-98 39-42	0.040			0.03
D-318-98 42-47	<0.001			<0.02
D-318-98 47-51	0.003			<0.02
D-318-98 51-55	<0.001			<0.02
D-318-98 55-60	<0.001			<0.02
D-318-98 60-65	<0.001			<0.02
D-318-98 65-70	<0.001			<0.02
D-318-98 70-75	0.001			0.03
D-318-98 75-80	0.004			0.06
D-318-98 80-85	<0.001			<0.02
D-318-98 85-90	<0.001			<0.02
D-318-98 90.0-92.5	<0.001			<0.02
D-318-98 92.5-96.0	0.008	0.005		0.04
D-318-98 96-100	<0.001			<0.02
D-318-98 100-105	<0.001			<0.02
D-318-98 105-110	<0.001			<0.02
D-318-98 110-115	<0.001			<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP051540

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-318-98

REPORTED : 23 NOV 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-318-98 115.0-117.5	0.001			0.04
D-318-98 117.5-119.5	<0.001			0.03
D-318-98 119.5-121.5	0.001			0.02
D-318-98 121.5-125.0	0.006			0.02
D-318-98 125-130	<0.001			<0.02
D-318-98 130-135	<0.001			<0.02
D-318-98 135-138	<0.001			<0.02
D-318-98 138.0-142.6	<0.001			<0.02
D-318-98 142.6-145.0	<0.001			<0.02
D-318-98 145-150	<0.001			<0.02
D-318-98 150-153	<0.001			<0.02
D-318-98 153-156	<0.001			<0.02
D-318-98 156-160	<0.001			<0.02
D-318-98 160-165	<0.001			<0.02
D-318-98 165-168	<0.001			<0.02
D-318-98 168-170	<0.001			<0.02
D-318-98 170-175	<0.001			<0.02
D-318-98 175-180	<0.001			0.03
D-318-98 180-185	<0.001			<0.02
D-318-98 185-190	<0.001			0.05
D-318-98 190-192	<0.001			<0.02
D-318-98 192-195	<0.001			<0.02
D-318-98 195-200	<0.001			<0.02
46590	0.547			2.77

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

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Santiago, Chile
Mendoza, Argentina

Company: ROSEBUD MINING LLC

Address: BOX 2610

City WINNEMUCCA State NV Zip 89445

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

Project Name: DEVELOPMENT Purchase Order Number:

Date Submitted: 11/9/98 Number of Samples: 48

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

D-318-98 SAMPLE IDENTIFICATION			TYPE	Au-Ag ACCORDING TO ROSEBUD MINE PROTOCOL ELEMENTS REQUIRED
0-5	70-75	130-135		190-192
5-10	75-80	135-138		192-195
10-15	80-85	138-142.6		195-200 TD
15-20	85-90	142.6-145		
20-26	90-92.5	145-150		
26-30	92.5-96	150-153		
30-35.8	96-100	153-156		
35.8-39	100-105	156-160		
39-42	105-110	160-165		
42-47	110-115	165-168		
47-51	115-117.5	168-170		
51-55	117.5-119.5	170-175		
55-60	119.5-121.5	175-180		
60-65	121.5-125	180-185		
65-70	125-130	185-190		

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

D-318-98	20	46	127.7
	100	47	128.2
	180	47	131.2

D-318-98 BOX 2
DEPTH 9 - 19
10
15

D-318-98 BOX 1
DEPTH 0 - 9
5

D-318-98 BOX 3
DEPTH 19 - 28
20
22
26

39
47
D- 318-98 BOX 5
DEPTH 37_5 - 47

30
D-318-98 BOX 4
DEPTH 28 - 37_5

D- 318-98 BOX 6
DEPTH 47 - 56_5

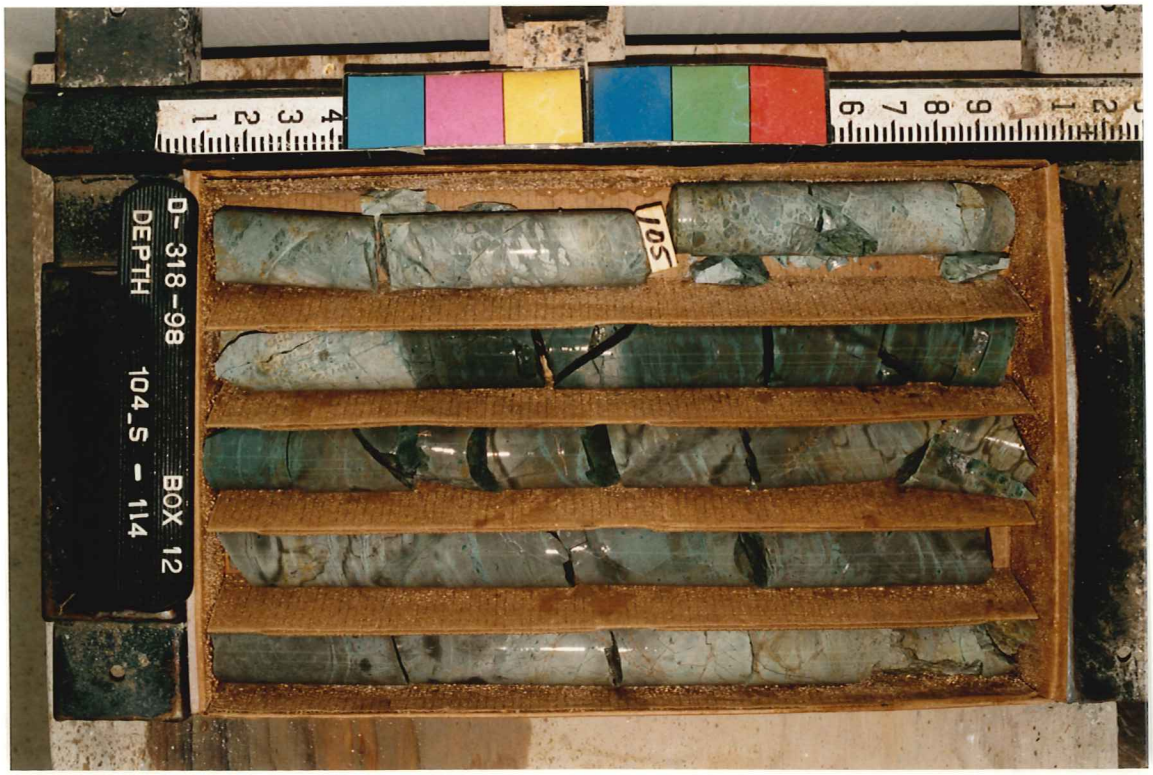
D- 318-98 BOX 8
DEPTH 66 - 76

D- 318-98 BOX 7
DEPTH 56_5 - 66

D- 318-98 BOX 9
DEPTH 76 - 86

95
D- 318-98 BOX 11
DEPTH 94_5 - 104_5

85
D- 318-98 BOX 10
DEPTH 86 - 94_5


105
D- 318-98 BOX 12
DEPTH 104_5 - 114

D- 318-98 BOX 14
DEPTH 123 - 132
135

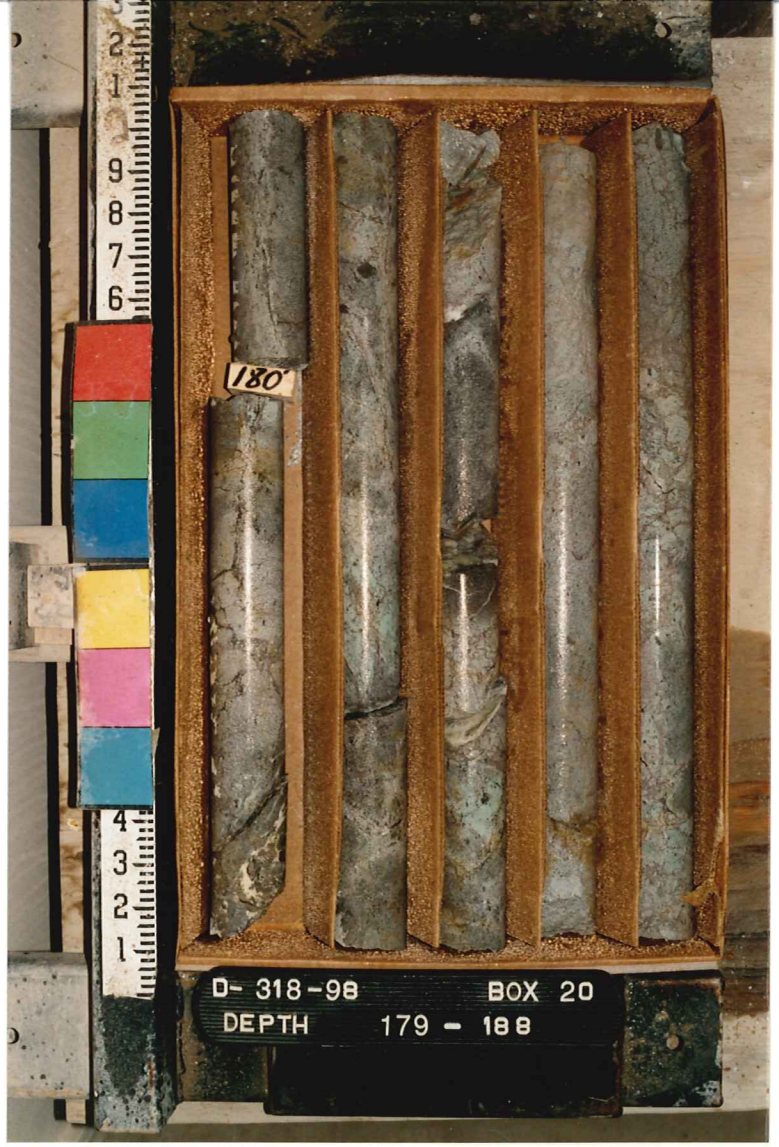
D- 318-98 BOX 13
DEPTH 114 - 123
115

D- 318-98 BOX 15
DEPTH 132 - 141
135

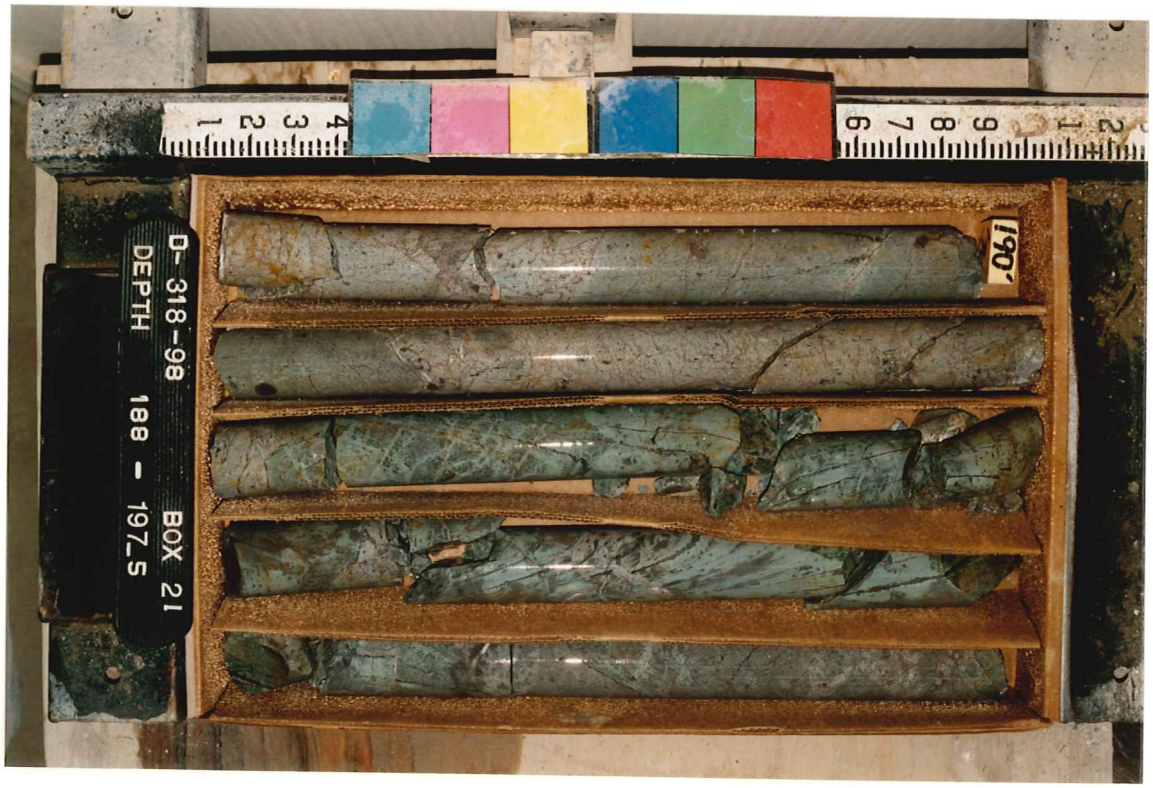
D- 318-98 BOX 17
DEPTH 150 - 159_5

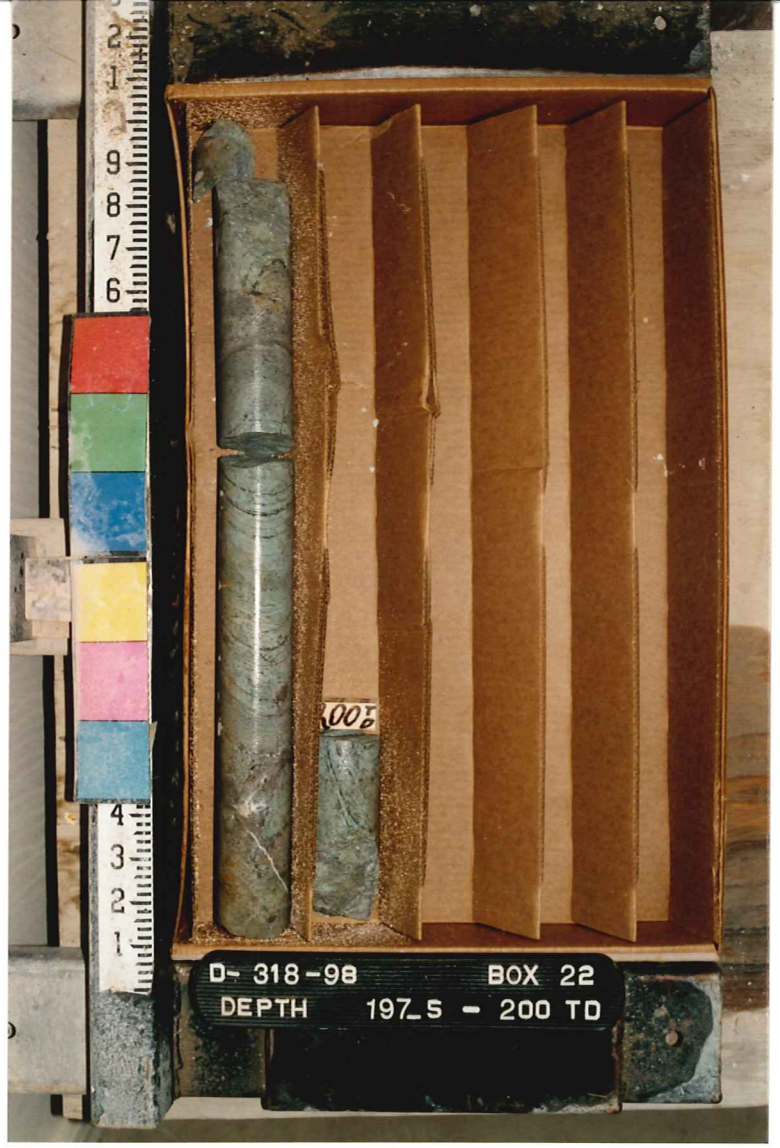
150
142
D- 318-98 BOX 16
DEPTH 141 - 150

160
D- 318-98 BOX 18
DEPTH 159_5 - 169_5


180'
D- 318-98 BOX 20
DEPTH 179 - 188

170'
D- 318-98 BOX 19
DEPTH 169_5 - 179


190'
D- 318-98 BOX 21
DEPTH 188 - 197_5

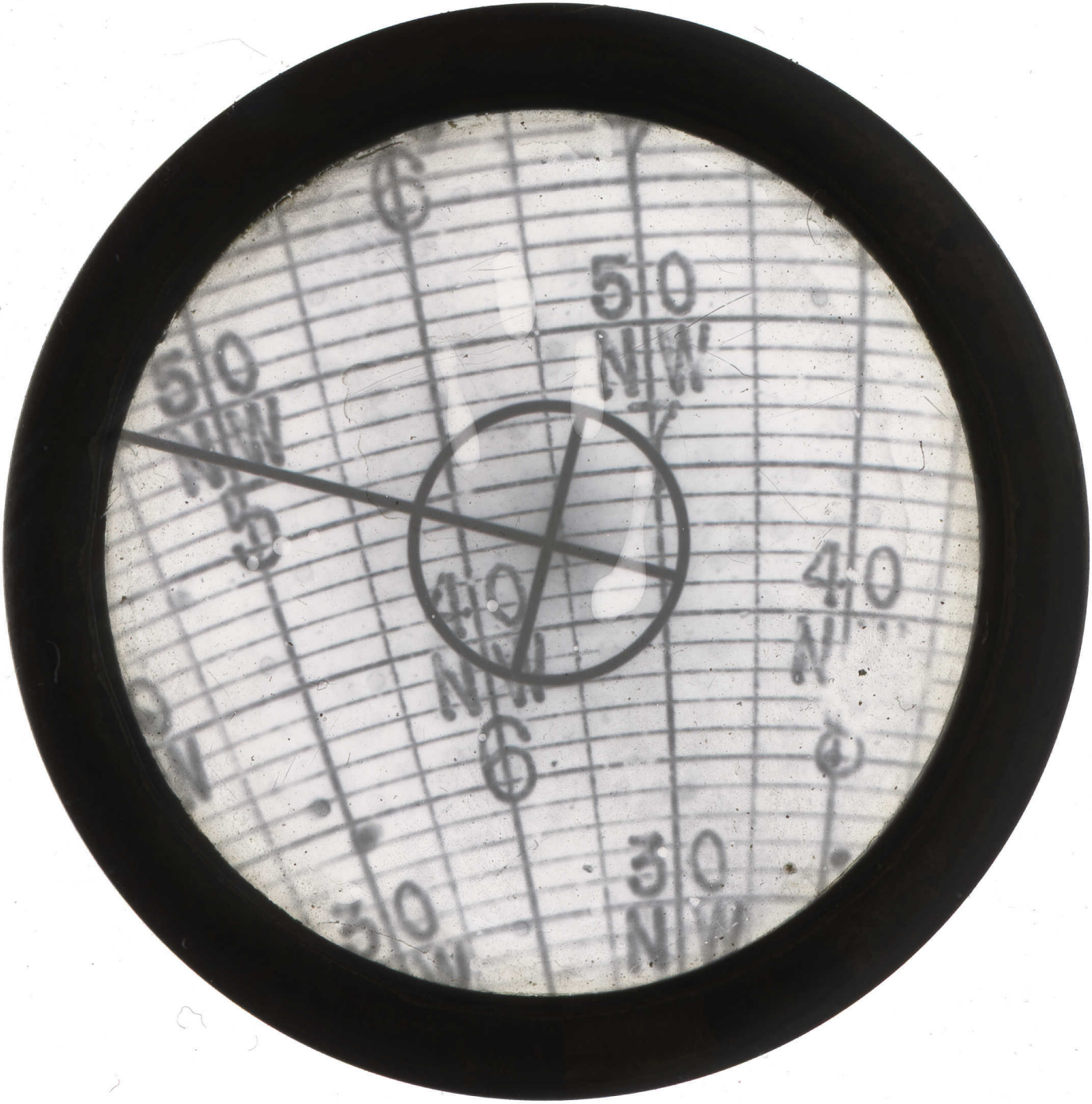

D- 318-98
BOX 22
DEPTH 197_5 - 200 TD

SINGLE SHOT
PHOTO DISC RECORD

COMPANY HECLA
WELL NAME D.31898
LEASE
TAKEN BY BAMFORD
DEPTH 20'
DATE 9-25-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO.
HI-1408

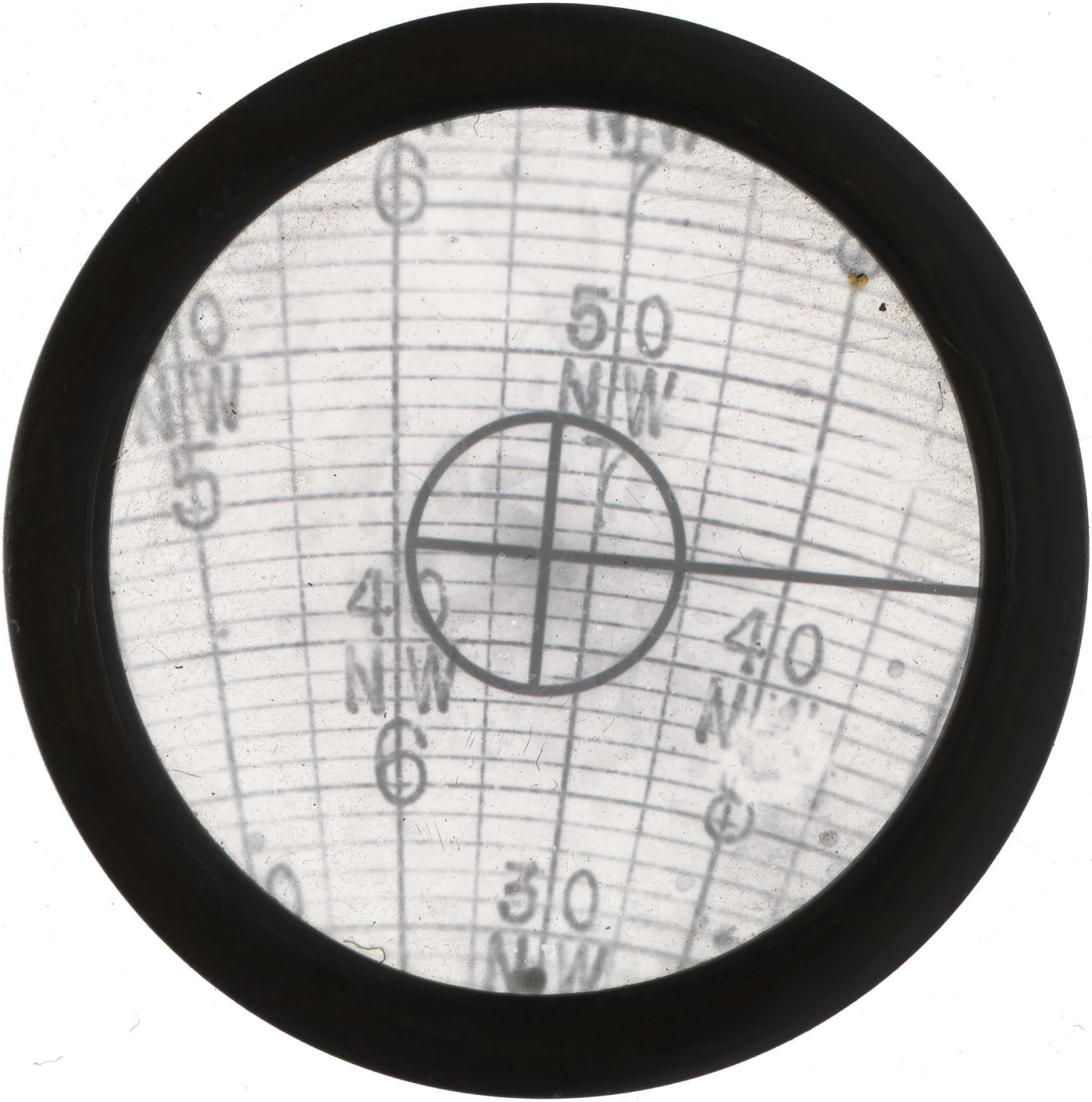
SINGLE SHOT
PHOTO DISC RECORD

COMPANY HCCIA
WELL NAME D-318 98
LEASE
TAKEN BY BAMFORD
DEPTH 120
DATE 9-25-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO.
HI-1408


50
NW
50
NW
40
NW
40
NW
30
NW
30
NW

SINGLE SHOT
PHOTO DISC RECORD

COMPANY HECLA
WELL NAME D-318-98
LEASE
TAKEN BY BAMFORD
DEPTH 100
DATE
DRIFT ANGLE
DIRECTION
TYPE
JOB NO.
HI-1408


50
NW
40
NW
40
30
NW