60001094

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-213-98
AUTHOR	B. Morris, 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.; East Zone
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; [redacted]; total depth 240'; receipt; handwritten notes; downhole camera images photographs 32p. 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 5/12/08
Initials Date
DB: mah
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

D-213-98

60001094 4010

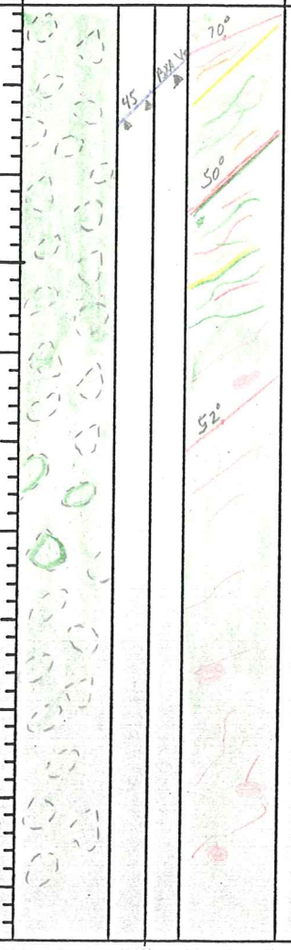
6000 1094

Hecla MINING COMPANY

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

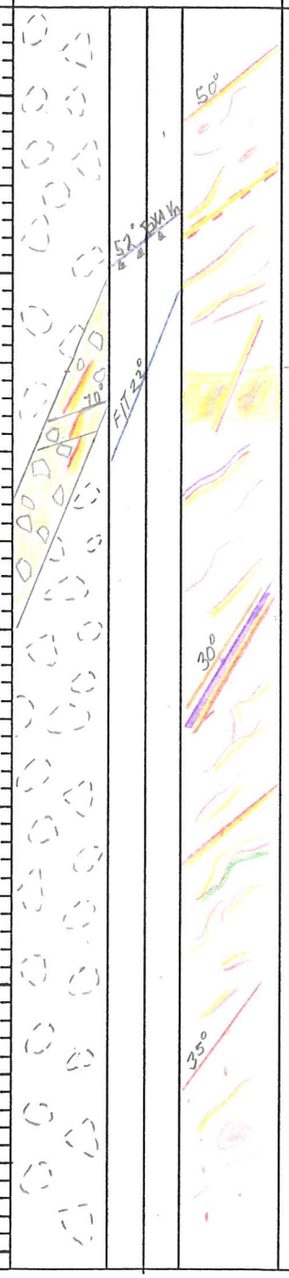
ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-213-98	LOCATION	East Zone Stope 42 Sec. 1500	REMARKS	The hole did not drill thru the South Ridge Fault Zone.
PAGE 1 OF 4		NORTHING			
DATE	5/15/98	EASTING			
LOGGED BY	Brian W. Morris	ELEVATION			
SCALE	1" = 10'	AZIMUTH	N54W		
TOTAL DEPTH	240'	INCLINATION	7°		

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	0 - 50' Autobrecciated Dozer Lt gry fg equigranular monolithic subrounded Clast "ghosts" supported by Lt gry fg equigranular Mtx.	5, 10, 15, 20, 25, 30, 35, 40, 45, 50			0 - 20' wk - Mod gr clay alt, wk - Mod gr clay Vn + stkwk, wk - Mod Musc + gr clay ± wh clay ± $CaCO_3$, Minor hydrothermal Bxa Vns wk - Mod argil. Minor Str Sulf Soaked patches. 20 - 55' Wk perv gr clay alt, wk Sulf + SiO_2 Vnlets.

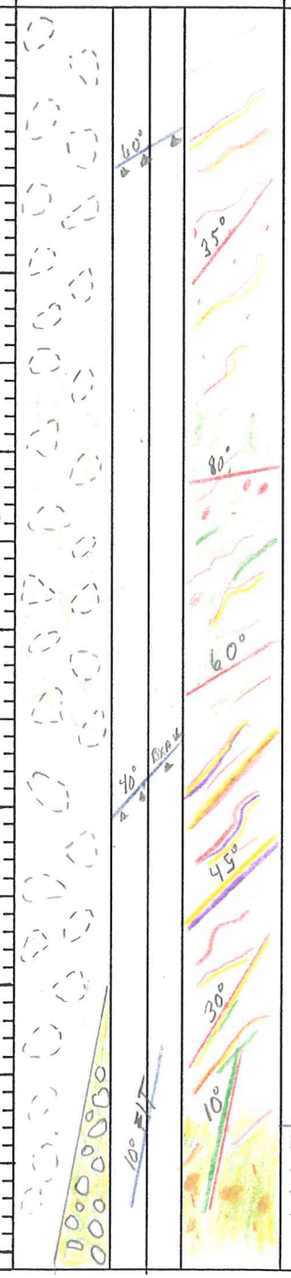
ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag
0	5.0					
5.0	10.0					
10.0	15.0					
15.0	20.0					
20.0	25.0					
25.0	30.0					
30.0	35.0					
35.0	40.0					
40.0	45.0					
45.0	50.0					

HOLE NUMBER D-213-98 PAGE 2 OF 4

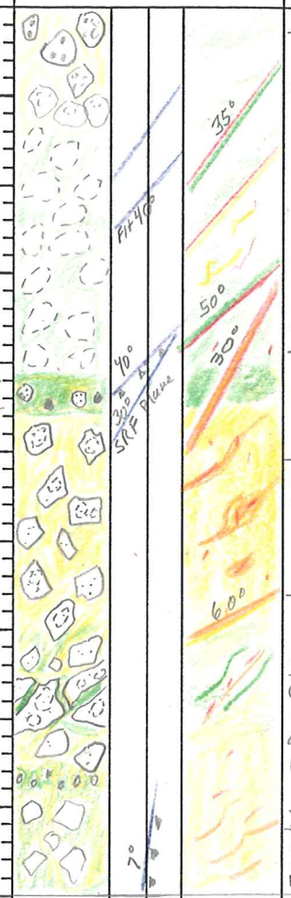
LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	50 - 120 Autobrecciate Dozer Lt gry equigranular monolithic subrounded clast "ghosts" supported by Lt gry fg equigranular Mtx.	55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120		Fault 70.5-73.5 Lt gry Autobxa Dozer sub-angular - Subrounded Clasts healed by dk gry SiO_2 ± Rx Flour Mtx	55-70' Mod Lt gry SiO_2 + Marc ± py Uni stkwk, Minor SiO_2 + Marc/py healed rubble bxa Vn 70.5-73.5 Str dk gry SiO_2 + diss fg sulf Vns & BXA MTX 73.5'-86.7' Minor SiO_2 + fg dk gry sulf healed Bxa Vns, wk sulf + SiO_2 ± barite Vn. 86.5-90.0 Str Vuggie Barite + Bladed Marc + wh SiO_2 ± wh Clay Vns 90-110' wk-locally Mod Marc/py + blk SiO_2 + gry SiO_2 ± gr clay Vn - Vnlets - micro bxa Vns. 110-120' wk sulf + SiO_2 Vnlets, Minor str sulf Soaked Patches, wk diss sulf.

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
50.0	55.0				
55.0	60.0				
60.0	65.0				
65.0	70.5				
70.5	73.5				
73.5	75.0				
75.0	78.0				
78.0	83.0				
83.0	86.7				
86.7	90.0				
90.0	95.0				
95.0	100.0				
100.0	105.0				
105.0	110.0				
110.0	115.0				
115.0	120.0				

HOLE NUMBER D-213-98 PAGE 3 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
	Reduced	120 - Autobrecciated Dozer Lt gry fg equigranular subrounded clast ghosts supported by fg equigranular MTx.	125 130 135 140 145 150 155 160 165 170 175 180 185 190			125-130 Mod gry SiO_2 healed rubble bxa Vns, wk Sulf Vnlets. 130-150' wk Sulf Vnlets + diss sulf. 140-160' wk-Mod sulf Soaked patches. 160-173.3' Mod .5-1cm wide vuggie barite+bladed Marc/Py ± Lt gry SiO_2 ± wh Clay, Mod Sulf+SiO_2 ± gr clay Vnlets, minor wk diss sulf Patches, wk pervasive gr clay alt. 173.3-182.5 Mod bladed Marc+SiO_2 ± gr clay Vns. 182.5-190.0 wk diss sulf, str gr clay alt. 185-190 Locally str MTx leaching w/ wh clay replacement.	120.0 125.0 130.0 135.0 140.0 145.0 150.0 155.0 160.0 165.0 170.0 173.3 175.0 180.0 182.5 185.0 190.0	125.0 130.0 135.0 140.0 145.0 150.0 155.0 160.0 165.0 170.0 173.3 175.0 180.0 182.5 185.0 190.0					
		Pima			182.5- Milled bxa Mostly MTx supported, Br-Tan Subrounded-rounded fg Auto-bxa clasts supported by gr SiO_2+Rx flour+gr clay MTx.						

HOLE NUMBER D-213-98 PAGE 4 OF 4

DIP.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	210.7' Lower SRF Plane Blk SiO_2 flooded ± 4-5cm wide along Fault Plane, becoming a milled bxa @ 211.0. 211.0-212.4' Tos 212.4-232.5 LBT Fine Grain Autobrecciated Pinkis Lt tan fg rounded-Subrounded monolith clast "ghosts" supported by slightly lighter shade of pinkish tan fg equigranular Mtx. 233.3-234.3 Milled BxA: Mtx supported Finely milled clasts, clasts are dk gry fg healed by gry gry Rx flour + SiO_2 Mtx 234.3-238.4 LBT Fine grain massive: Tan-br fg massive Tuff. 238.4-240 Milled BxA! Mtx supported finely milled fg LBT & gry SiO_2 clasts healed by gry gry SiO_2 + Rx flour Mtx. T.D. 240'	195 200 205 210 215 220 225 230 235 240		190-198.6 Rubble BXA: Mtx-Clast supported, Autobxa Dozer Clasts healed by gr clay + SiO_2 + Rx flour Mtx 209.7-210' Milled bxa Vn: Finely milled Clasts w/ Rx flour + gr SiO_2 Mtx, minor wh SiO_2 + wh clay. 211.0-212.4 Milled bxa: Clasts are gr mg reworked rounded Tuff clasts & blk phyllite flakes healed by gr SiO_2. 212.4-224.3' Rubble BxA! angular-Subangular LBT Autobxa Clasts healed by gry SiO_2 Mtx. 224.3-233.3 Rubble-Crackle BxA: LBT pinkish fg Autobxa subangular-angular LBT clasts healed by gr clay + gry-gry gr SiO_2 Mtx 234.3-238.4 Rubble BXA! Mostly Mtx supported sub-angular-angular clasts healed by gry SiO_2	190-195' wk wh clay + SiO_2 + Marc Vn 197.6-207.0' Mod gr clay replacement of Autobxa Mtx, Wk SiO_2 + bladed Marc + wh clay Vn, V. wk dk gry SiO_2 Vn, wk diss Sulf, minor wk diss sulf patches. 205-207' Str gr clay replacement of Autobxa Mtx, wk-Mod gry SiO_2 str wk 210.8-212.2 wk-Mod leaching of Mtx w/ wk druzy Qt lining. 212.4-232.5 Mod-Str leaching of Mtx, Vugs are filled w/ wh SiO_2 + wh clay + bladed Marc ± Cpy, wk diss sulf. 224.3-233.3 wk leaching w/ minor wh clay + Marc filled vugs. 234.3-238.4 wk-Mod wh clay ± gr clay replacement of Mtx.

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
190.0	195.0				
195.0	197.6				
198.6	200.0				
200.0	205.0				
205.0	207.0				
207.0	210.7				
210.7	212.4				
212.4	215.0				
215.0	220.0				
220.0	224.3				
224.3	230.0				
230.0	233.3				
233.3	234.3				
234.3	238.4				
238.4	240.0				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-213-98 DATE: 5/15/98 LOGGED BY: Brian W. Morris PAGE 1 OF ____

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	5	96	96	35										
5	10	98	98	76										
10	15	100	100	78										
15	20	96	96	54										
20	25	98	98	80										
25	30	100	100	30										
30	35	100	100	74										
35	40	100	100	78										
40	45	92	92	54										
45	50	94	94	85										
50	55	92	92	69										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-213-98 DATE: 5/15/98 LOGGED BY: BLUM PAGE 2 OF

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)
55	60	96	96	92										
60	65	100	100	84										
65	70	80	80	30										
70	75	100	100	68										
75	78	1.13	1.13	94										
78	83	100	100	74										
83	85	85	85	100										
85	90	96	96	56										
90	95	90	90	84										
95	100	92	92	96										
100	105	100	100	68										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-213-98 DATE: 5/15/98 LOGGED BY: BWM PAGE 3 OF

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)
105	110	96	96	63										
110	115	92	92	80										
115	120	90	90	40										
120	125	96	96	58										
125	130	100	100	72										
130	135	96	96	43										
135	140	96	96	71										
140	145	96	96	81										
145	150	94	94	36										
150	155	96	96	73										
155	160	98	98	92										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-213-98 DATE: 5/15/98 LOGGED BY: BWM PAGE 4 OF

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)
160	165	100	100	66										
165	170	94	94	64										
170	175	94	94	89										
175	180	100	100	60										
180	185	94	94	60										
185	190	98	98	82										
190	195	100	100	90										
195	200	96	96	94										
200	205	90	90	62										
205	210	82	82	56										
210	215	98	98	61										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-213-98 DATE: 5/15/98 LOGGED BY: BWM PAGE 5 OF

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)
215	220	96	96	81										
220	225	100	100	62										
225	230	98	98	92										
230	235	94	94	64										
235	240	96	96	69										

American Assay Laboratories

INVOICE

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

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431

(702) 356-0606

INVOICE NO: SP 0048922-IN
INVOICE DATE: 06/05/98

INVOICE TO:
THE ROSEBUD MINING CO., LLC
HECLA MINING COMPANY, OPERATOR
P.O. BOX 2610
WINNEMUCCA NV 89446

THE ROSEBUD MINING CO., LLC
HECLA MINING COMPANY, OPERATOR
P.O. BOX 2610
WINNEMUCCA NV 89446

CUSTOMER P.O.	PROJECT	TERMS
D-213-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
58	SAMPLES RECEIVED	.00	.00
57	JAW CRUSHING CHARGE	1.30	74.10
57	COARSE MILLING CHARGE	4.50	256.50
57	SPLITTING CHARGE	2.40	136.80
57	RING MILLING CHARGE	2.00	114.00
58	Au (1 A.T. FIRE ASSAY)	8.00	464.00
21	Au ANALYSES/GRAVIMETRIC	8.75	183.75
58	HYDROCHLORIC/NITRIC DIGESTION	2.00	116.00
58	Ag ANALYSES	1.00	58.00

86-5110-477
KA

NET INVOICE:	1,403.15
LESS DISCOUNT:	280.63
FREIGHT:	.00
INVOICE TOTAL:	1,122.52

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048922

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-213-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 58 REPORTED : 4 JUN 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048922

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-213-98 00-05	0.007			0.05
D-213-98 05-10	0.005			0.03
D-213-98 10-15	0.005			0.03
D-213-98 15-20	0.013			0.05
D-213-98 20-25	0.006			0.05
D-213-98 25-30	0.004			0.05
D-213-98 30-35	0.010			0.08
D-213-98 35-40	0.002			0.03
D-213-98 40-45	0.001			0.03
D-213-98 45-50	0.001			0.03
D-213-98 50-55	0.005			0.03
D-213-98 55-60	0.190		0.168	0.08
D-213-98 60-65	0.096		0.082	0.08
D-213-98 65.0-70.5	0.097		0.105	0.08
D-213-98 70.5-73.5	0.124		0.090	0.08
D-213-98 73.5-75.0	0.006			0.05
D-213-98 75-78	0.044			0.08
D-213-98 78-83	0.010	0.012		0.05
D-213-98 83.0-86.7	0.009			0.07
D-213-98 86.7-90.0	0.125		0.116	0.08
D-213-98 90-95	0.011			0.06
D-213-98 95-100	0.024			0.06
D-213-98 100-105	0.012			0.04
D-213-98 105-110	0.028			0.05
D-213-98 110-115	0.011			0.05

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048922

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-213-98 115-120	0.006			0.04
D-213-98 120-125	0.004			0.05
D-213-98 125-130	0.033			0.06
D-213-98 130-135	0.012			0.03
D-213-98 135-140	0.001			0.03
D-213-98 140-145	0.015			0.03
D-213-98 145-150	0.029			0.03
D-213-98 150-155	0.009			0.03
D-213-98 155-160	0.035			0.05
D-213-98 160-165	0.179		0.224	0.08
D-213-98 165-170	0.043			0.09
D-213-98 170.0-173.3	0.130		0.163	0.20
D-213-98 173.3-175.0	0.171	0.103	0.138	0.14
D-213-98 175-180	0.074	0.122	0.051	0.10
D-213-98 180.0-182.5	0.022			0.04
D-213-98 182.5-185.0	0.010			0.10
D-213-98 185-190	0.122	0.065	0.186	0.99
D-213-98 190-195	0.041	0.018	0.116	0.10
D-213-98 195.0-197.6	0.008			0.05
D-213-98 197.6-200.0	0.050		0.057	0.07
D-213-98 200-205	0.411		0.320	0.12
D-213-98 205-207	0.128		0.132	0.09
D-213-98 207.0-210.7	0.077		0.061	0.06
D-213-98 210.7-212.4	0.040			0.04
D-213-98 212.4-215.0	0.242		0.180	0.67

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ANALYSIS REPORT SP048922

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-213-98 215-220	0.424	0.205	0.678	0.46
D-213-98 220.0-224.3	0.788		0.777	1.27
D-213-98 224.3-230.0	0.160		0.169	0.74
D-213-98 230.0-233.3	0.974		1.112	0.96
D-213-98 233.3-234.3	0.037			0.03
D-213-98 234.3-238.4	0.136		0.166	0.50
D-213-98 238.4-240.0	0.012			0.04
31098	0.541			4.93

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP048922

American Assay Laboratories

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HECLA MINING COMPANY

COPIES TO : KURT ALLEN
:
:
:

CLIENT REFERENCE No: D-213-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 58 REPORTED : 4 JUN 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048922

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-213-98 00-05	0.007			0.05
D-213-98 05-10	0.005			0.03
D-213-98 10-15	0.005			0.03
D-213-98 15-20	0.013			0.05
D-213-98 20-25	0.006			0.05
D-213-98 25-30	0.004			0.05
D-213-98 30-35	0.010			0.08
D-213-98 35-40	0.002			0.03
D-213-98 40-45	0.001			0.03
D-213-98 45-50	0.001			0.03
D-213-98 50-55	0.005			0.03
D-213-98 55-60	0.190		0.168	0.08
D-213-98 60-65	0.096		0.082	0.08
D-213-98 65.0-70.5	0.097		0.105	0.08
D-213-98 70.5-73.5	0.124		0.090	0.08
D-213-98 73.5-75.0	0.006			0.05
D-213-98 75-78	0.044			0.08
D-213-98 78-83	0.010	0.012		0.05
D-213-98 83.0-86.7	0.009			0.07
D-213-98 86.7-90.0	0.125		0.116	0.08
D-213-98 90-95	0.011			0.06
D-213-98 95-100	0.024			0.06
D-213-98 100-105	0.012			0.04
D-213-98 105-110	0.028			0.05
D-213-98 110-115	0.011			0.05

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048922

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-213-98 115-120	0.006			0.04
D-213-98 120-125	0.004			0.05
D-213-98 125-130	0.033			0.06
D-213-98 130-135	0.012			0.03
D-213-98 135-140	0.001			0.03
D-213-98 140-145	0.015			0.03
D-213-98 145-150	0.029			0.03
D-213-98 150-155	0.009			0.03
D-213-98 155-160	0.035			0.05
D-213-98 160-165	0.179		0.224	0.08
D-213-98 165-170	0.043			0.09
D-213-98 170.0-173.3	0.130		0.163	0.20
D-213-98 173.3-175.0	0.171	0.103	0.138	0.14
D-213-98 175-180	0.074	0.122	0.051	0.10
D-213-98 180.0-182.5	0.022			0.04
D-213-98 182.5-185.0	0.010			0.10
D-213-98 185-190	0.122	0.065	0.186	0.99
D-213-98 190-195	0.041	0.018	0.116	0.10
D-213-98 195.0-197.6	0.008			0.05
D-213-98 197.6-200.0	0.050		0.057	0.07
D-213-98 200-205	0.411		0.320	0.12
D-213-98 205-207	0.128		0.132	0.09
D-213-98 207.0-210.7	0.077		0.061	0.06
D-213-98 210.7-212.4	0.040			0.04
D-213-98 212.4-215.0	0.242		0.180	0.67

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048922

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-213-98 215-220	0.424	0.205	0.678	0.46
D-213-98 220.0-224.3	0.788		0.777	1.27
D-213-98 224.3-230.0	0.160		0.169	0.74
D-213-98 230.0-233.3	0.974		1.112	0.96
D-213-98 233.3-234.3	0.037			0.03
D-213-98 234.3-238.4	0.136		0.166	0.50
D-213-98 238.4-240.0	0.012			0.04
31098	0.541			4.93

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048922

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-213-98 RECEIVED : 20 MAY 1998

NO. SAMPLES : 58 REPORTED : 4 JUN 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048922

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-213-98 00-05	0.007			0.05
D-213-98 05-10	0.005			0.03
D-213-98 10-15	0.005			0.03
D-213-98 15-20	0.013			0.05
D-213-98 20-25	0.006			0.05
D-213-98 25-30	0.004			0.05
D-213-98 30-35	0.010			0.08
D-213-98 35-40	0.002			0.03
D-213-98 40-45	0.001			0.03
D-213-98 45-50	0.001			0.03
D-213-98 50-55	0.005			0.03
D-213-98 55-60	0.190		0.168	0.08
D-213-98 60-65	0.096		0.082	0.08
D-213-98 65.0-70.5	0.097		0.105	0.08
D-213-98 70.5-73.5	0.124		0.090	0.08
D-213-98 73.5-75.0	0.006			0.05
D-213-98 75-78	0.044			0.08
D-213-98 78-83	0.010	0.012		0.05
D-213-98 83.0-86.7	0.009			0.07
D-213-98 86.7-90.0	0.125		0.116	0.08
D-213-98 90-95	0.011			0.06
D-213-98 95-100	0.024			0.06
D-213-98 100-105	0.012			0.04
D-213-98 105-110	0.028			0.05
D-213-98 110-115	0.011			0.05

PROVISIONAL REPORT SP048922

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-213-98 115-120	0.006			0.04
D-213-98 120-125	0.004			0.05
D-213-98 125-130	0.033			0.06
D-213-98 130-135	0.012			0.03
D-213-98 135-140	0.001			0.03
D-213-98 140-145	0.015			0.03
D-213-98 145-150	0.029			0.03
D-213-98 150-155	0.009			0.03
D-213-98 155-160	0.035			0.05
D-213-98 160-165	0.179		0.224	0.08
D-213-98 165-170	0.043			0.09
D-213-98 170.0-173.3	0.130		0.163	0.20
D-213-98 173.3-175.0	0.171	0.103	0.138	0.14
D-213-98 175-180	0.074	0.122	0.051	0.10
D-213-98 180.0-182.5	0.022			0.04
D-213-98 182.5-185.0	0.010			0.10
D-213-98 185-190	0.122	0.065	0.186	0.99
D-213-98 190-195	0.041	0.018	0.116	0.10
D-213-98 195.0-197.6	0.008			0.05
D-213-98 197.6-200.0	0.050		0.057	0.07
D-213-98 200-205	0.411		0.320	0.32
D-213-98 205-207	0.125		0.132	0.09
D-213-98 207.0-210.7	0.077		0.061	0.06
D-213-98 210.7-212.4	0.040			0.04
D-213-98 212.4-215.0 2.6	0.242		0.180	0.67

212.4 - 233.3
= 20.9'
0.491 Au
0.81 Ag

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048922

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-213-98

REPORTED : 4 JUN 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-213-98 215-220 5	0.424	0.205	0.678	0.46
D-213-98 220.0-224.3 4.3	0.788		0.777	1.27
D-213-98 224.3-230.0 5.7	0.160		0.169	0.74
D-213-98 230.0-233.3 3.3	0.974		1.112	0.96
D-213-98 233.3-234.3	0.037			0.03
D-213-98 234.3-238.4	0.136		0.166	0.50
D-213-98 238.4-240.0	0.012			0.04
31098	0.541			4.93

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

Sparks Office
1500 Glendale Ave.
Nevada 89431
Box 11530
Reno, NV 89510
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(702) 356-0606
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Tucson, AZ 85706
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(520) 294-6352

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

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

Other Offices
Lima, Peru
Santiago, Chile
Mendoza, Argentina

Company: Rosebud Mining Co.

Address: P.O. 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: 5/18/98 Number of Samples: 57

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

ID-213-98 / SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED	
0-5.0	73.5-75.0	core	140.0-145.0	200.0-205.0
5.0-10.0	75.0-78.0		145.0-150.0	~~200~~. 205.0-207.0
10.0-15.0	78.0-83.0		150.0-155.0	207.0-210.7
15.0-20.0	83.0-86.7		155.0-160.0	210.7-212.4
20.0-25.0	86.7-90.0		160.0-165.0	212.4-215.0
25.0-30.0	90.0-95.0		165.0-170.0	215.0-220.0
30.0-35.0	95.0-100.0		170.0-173.3	220.0-224.3
35.0-40.0	100.0-105.0		173.3-175.0	224.3-230.0
40.0-45.0	105.0-110.0		175.0-180.0	230.0-233.3
45.0-50.0	110.0-115.0		180.0-182.5	233.3-234.3
50.0-55.0	115.0-120.0		182.5-185.0	234.3-238.4
55.0-60.0	120.0-125.0		185.0-190.0	238.4-240.0
60.0-65.0	125.0-130.0		190.0-195.0	
65.0-70.5	130.0-135.0		195.0-197.6	
70.5-73.5	135.0-140.0		197.6-200.0	

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

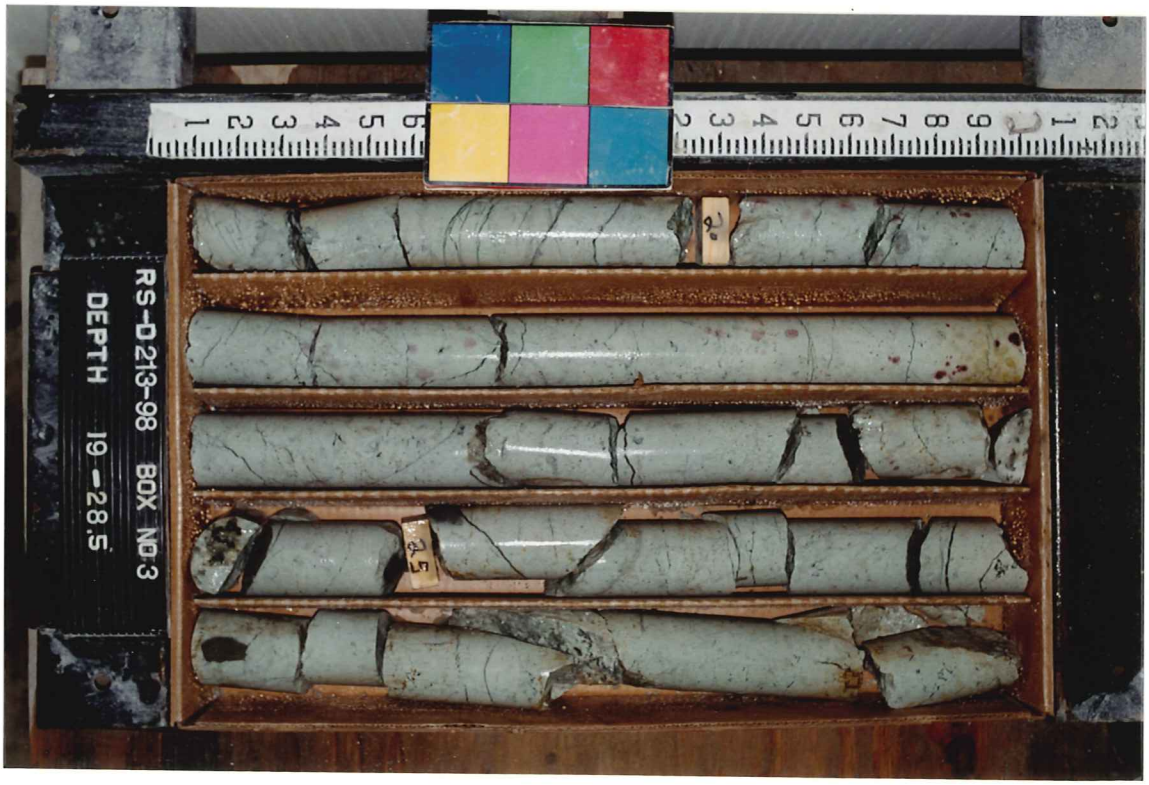
Comments:
Au-Ag according to Rosebud protocol

CLIENT FILE COPY

D-213-98	0	6.5	306.2
	120	7	305.7
	240	6	304.7

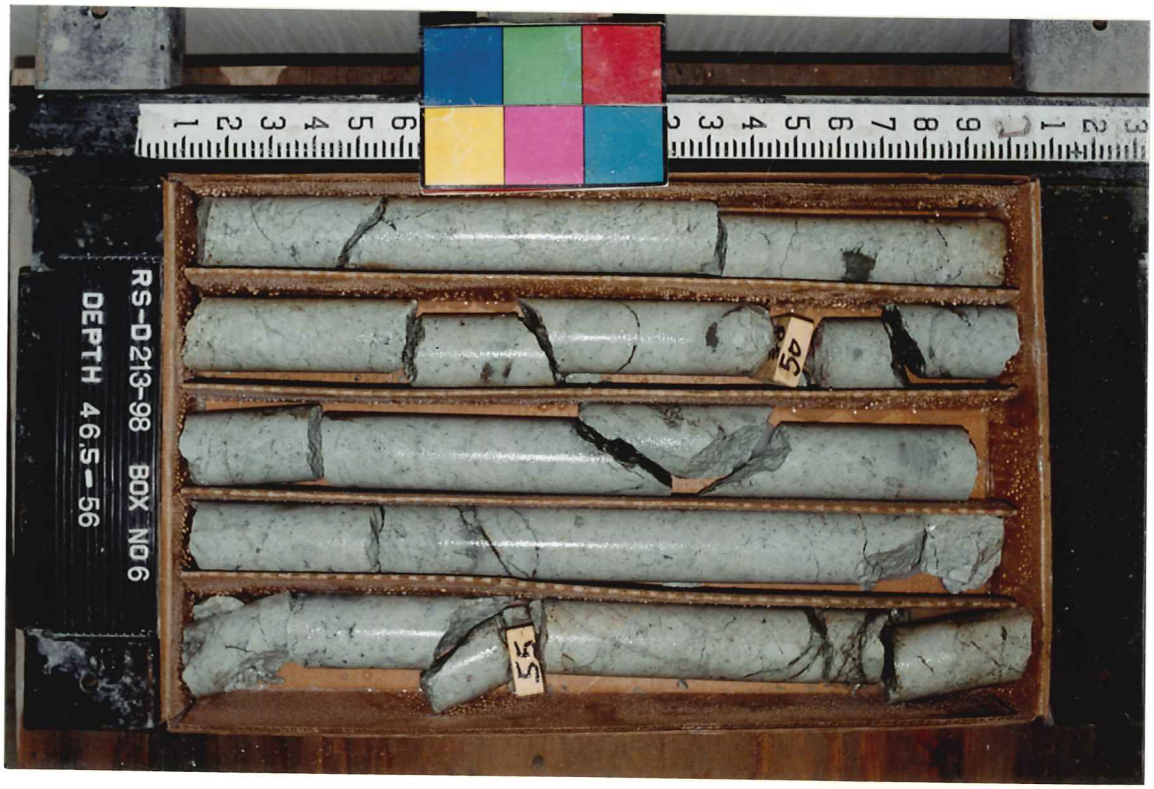
15
a
RS-D 213-98 BOX NO 2
DEPTH 9.5-19

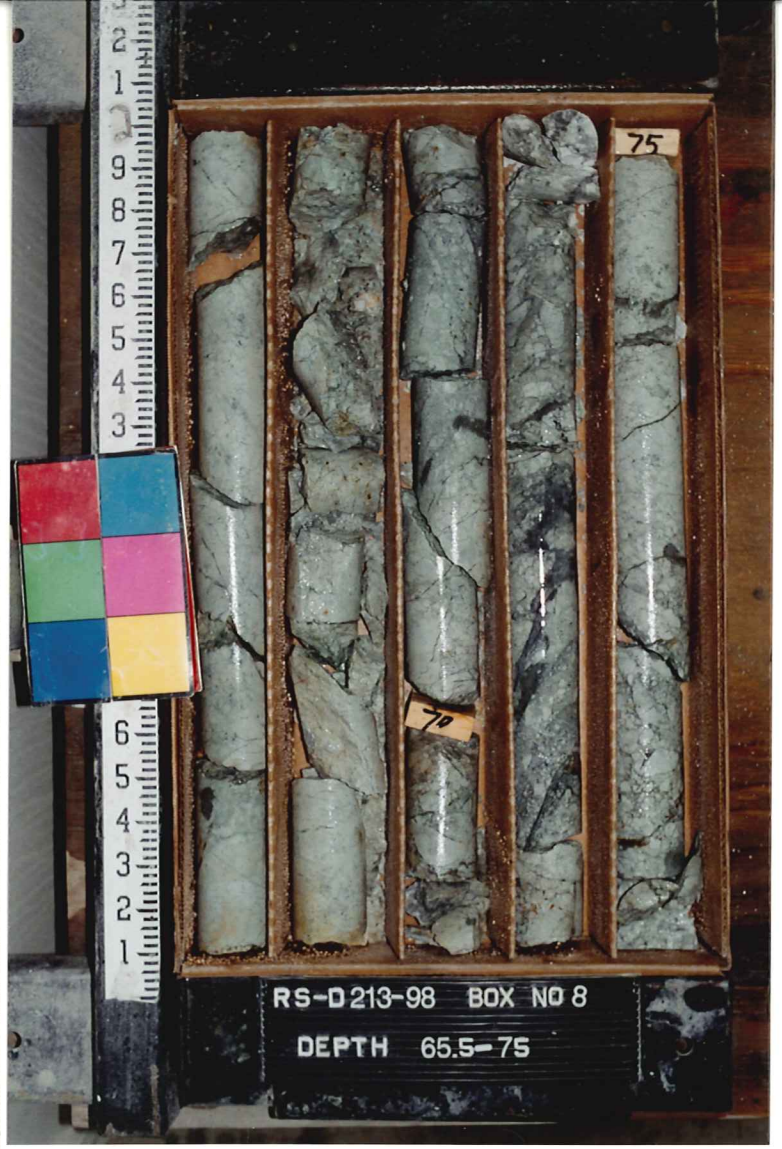
5
RS-D 213-98 BOX NO 1
DEPTH 0 - 9.5


RS-D 213-98 BOX NO 3
DEPTH 19 - 28.5

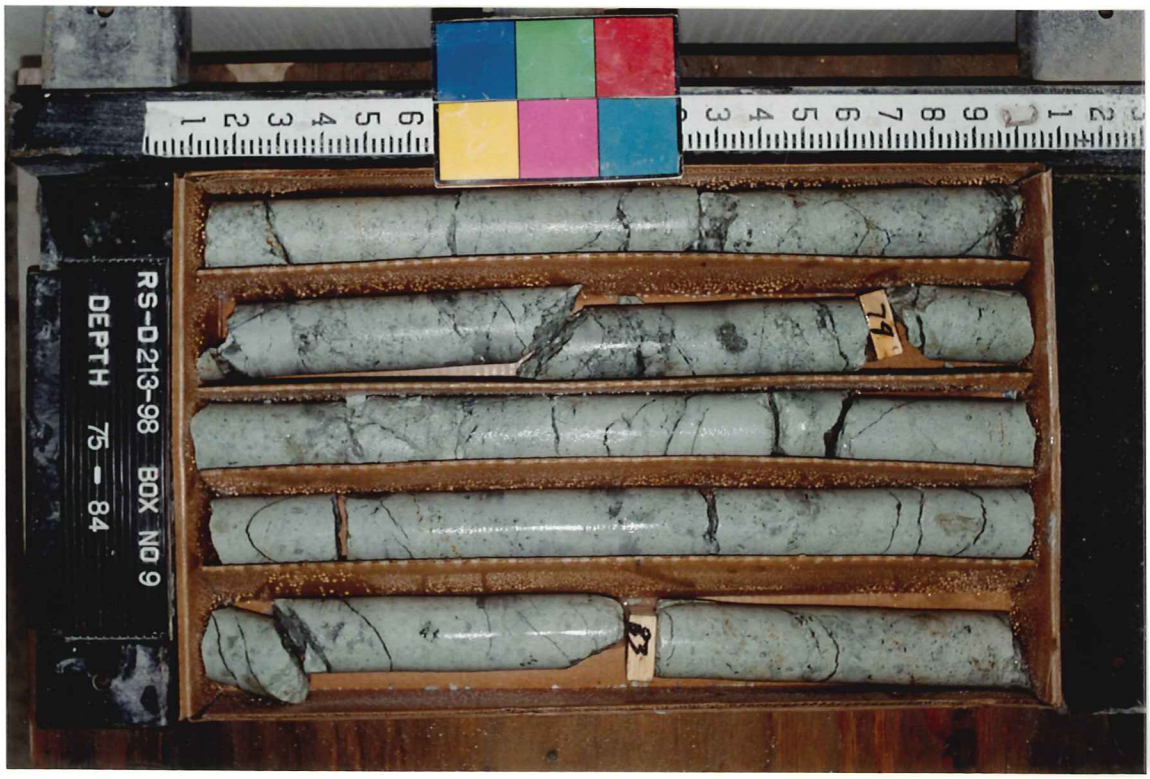
RS-D 213-98 BOX NO 5
DEPTH 37.5-46.5

RS-D 213-98 BOX NO 4
DEPTH 28.5-37.5


RS-D 213-98 BOX NO 6
DEPTH 46.5-56

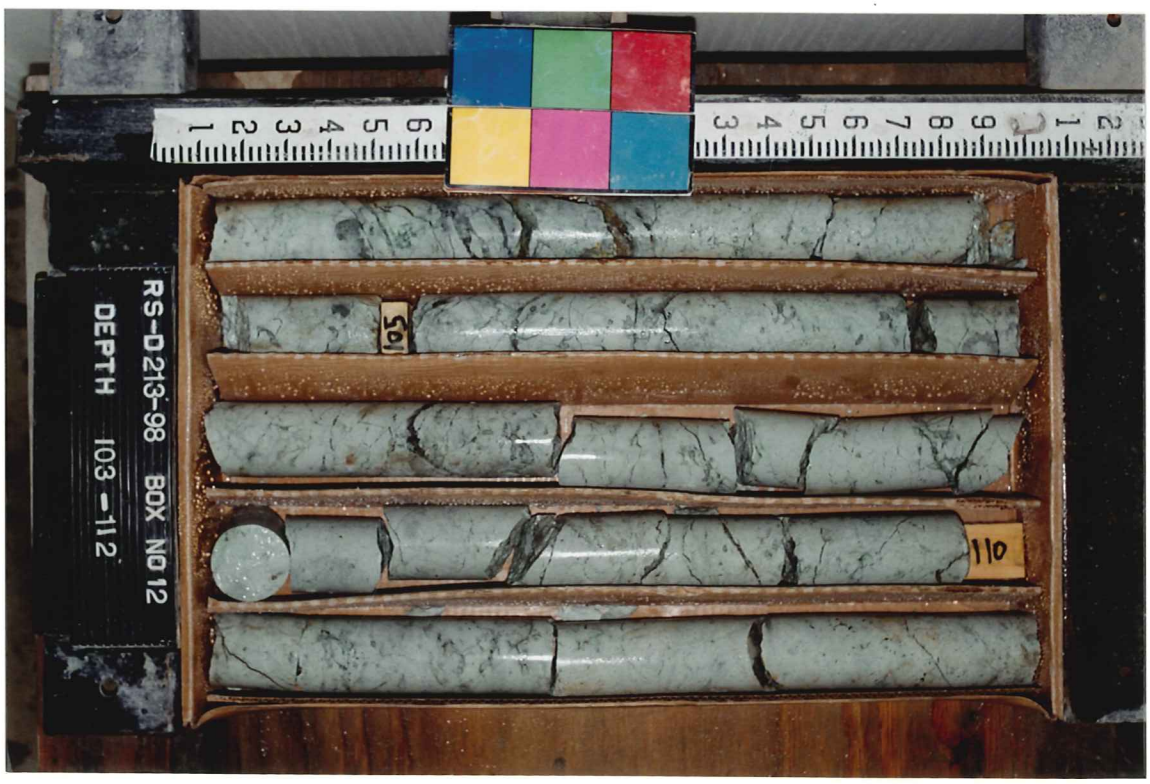

75
70
RS-D 213-98 BOX NO 8
DEPTH 65.5-75

65
60
RS-D 213-98 BOX NO 7
DEPTH 56 -65.5


RS-D 213-98 BOX NO 9
DEPTH 75 - 84
74
83

95
RS-D 213-98 BOX NO 11
DEPTH 93.5-103

85
RS-D 213-98 BOX NO 10
DEPTH 84 - 93.5


105
110
RS-D 213-98 BOX NO 12
DEPTH 103 - 112

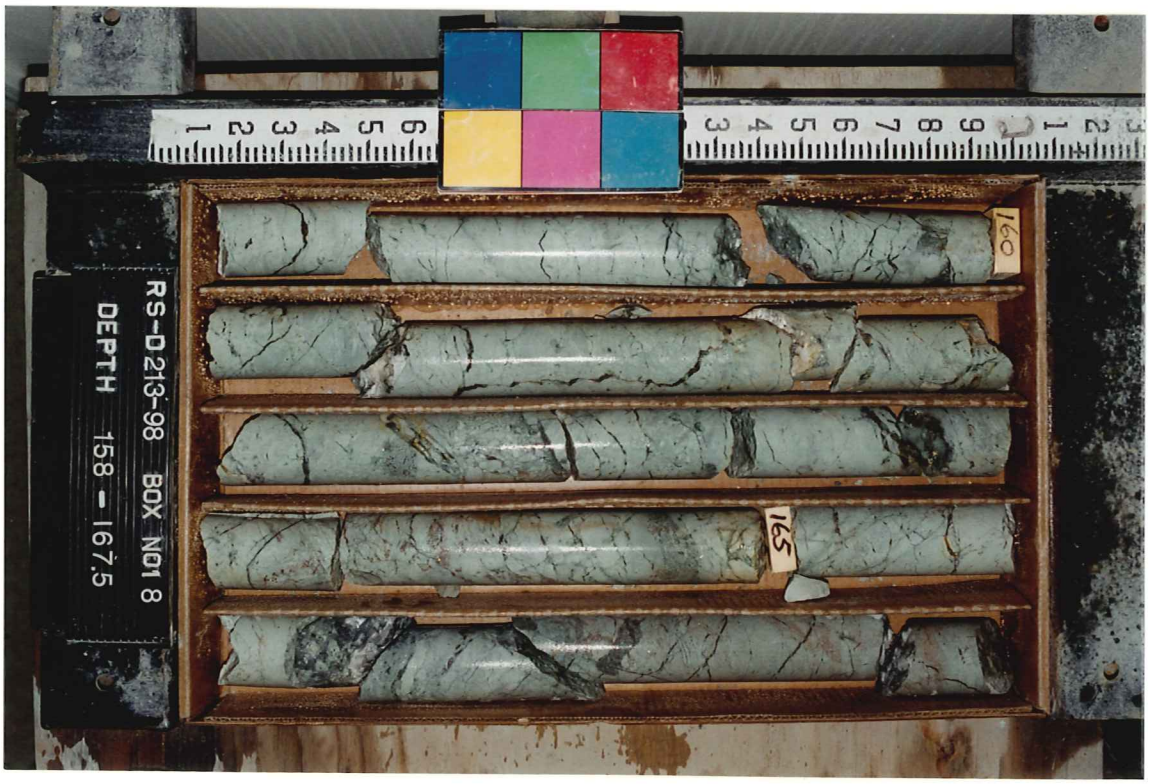
RS-D 213-98 BOX NO 14
DEPTH 121.5-130.5

115
RS-D 213-98 BOX NO 13
DEPTH 112-121.5

RS-D 213-98 BOX NO 15
DEPTH 130.5-139.5

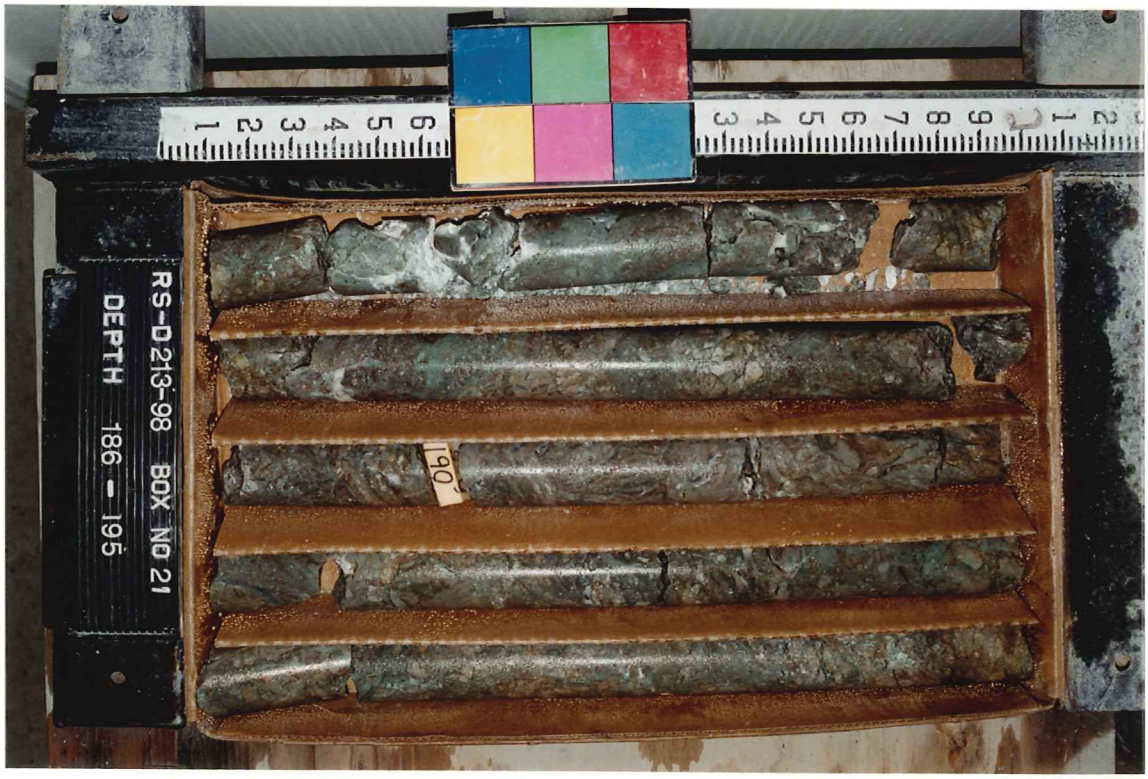
150
RS-D 213-98 BOX NO 17
DEPTH 149 -158

145
140
RS-D 213-98 BOX NO 16
DEPTH 139.5 - 149


160
165
RS-D 213-98 BOX NO 18
DEPTH 158 - 167.5

180
185
RS-D 213-98 BOX NO 20
DEPTH 177 -186

170
RS-D 213-98 BOX NO19
DEPTH 167.5-177


190
RS-D 213-98 BOX NO 21
DEPTH 186 - 195

210
RS-D 213-98 BOX NO 23
DEPTH 205 - 214.8

200
195
RS-D 213-98 BOX NO 22
DEPTH 195 - 205

215
220
RS-D 213-98 BOX NO 24
DEPTH 214.8 - 224.5

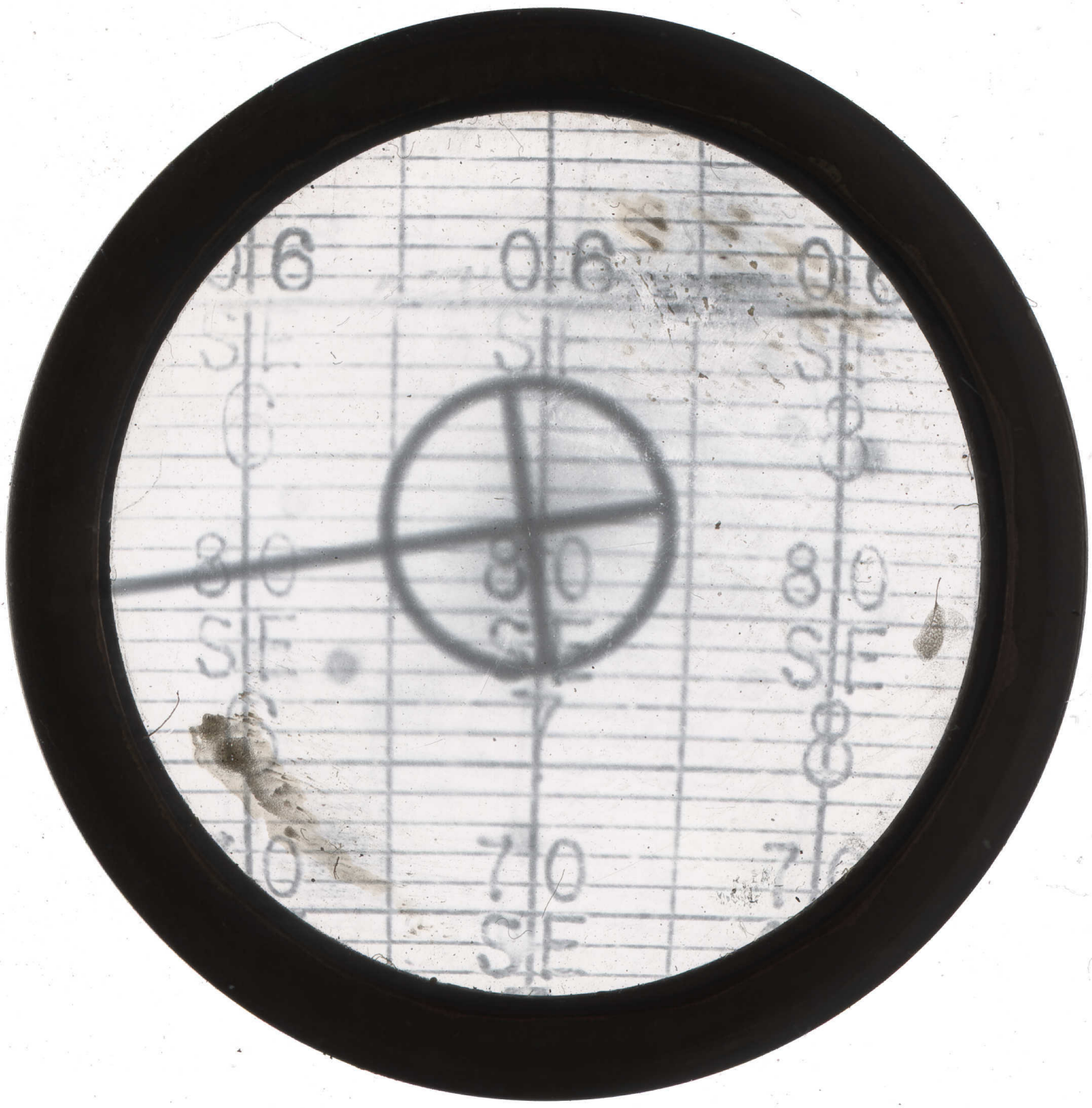
RS-D 213-98 BOX NO 26
DEPTH 233.5 - 240 TD

225
230
RS-D 213-98 BOX NO 25
DEPTH 224.5 - 233.5

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-213-98
LEASE
TAKEN BY Hunter
DEPTH Collar
DATE 3-28-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO. 1

HI-1408



SINGLE SHOT
PHOTO DISC RECORD

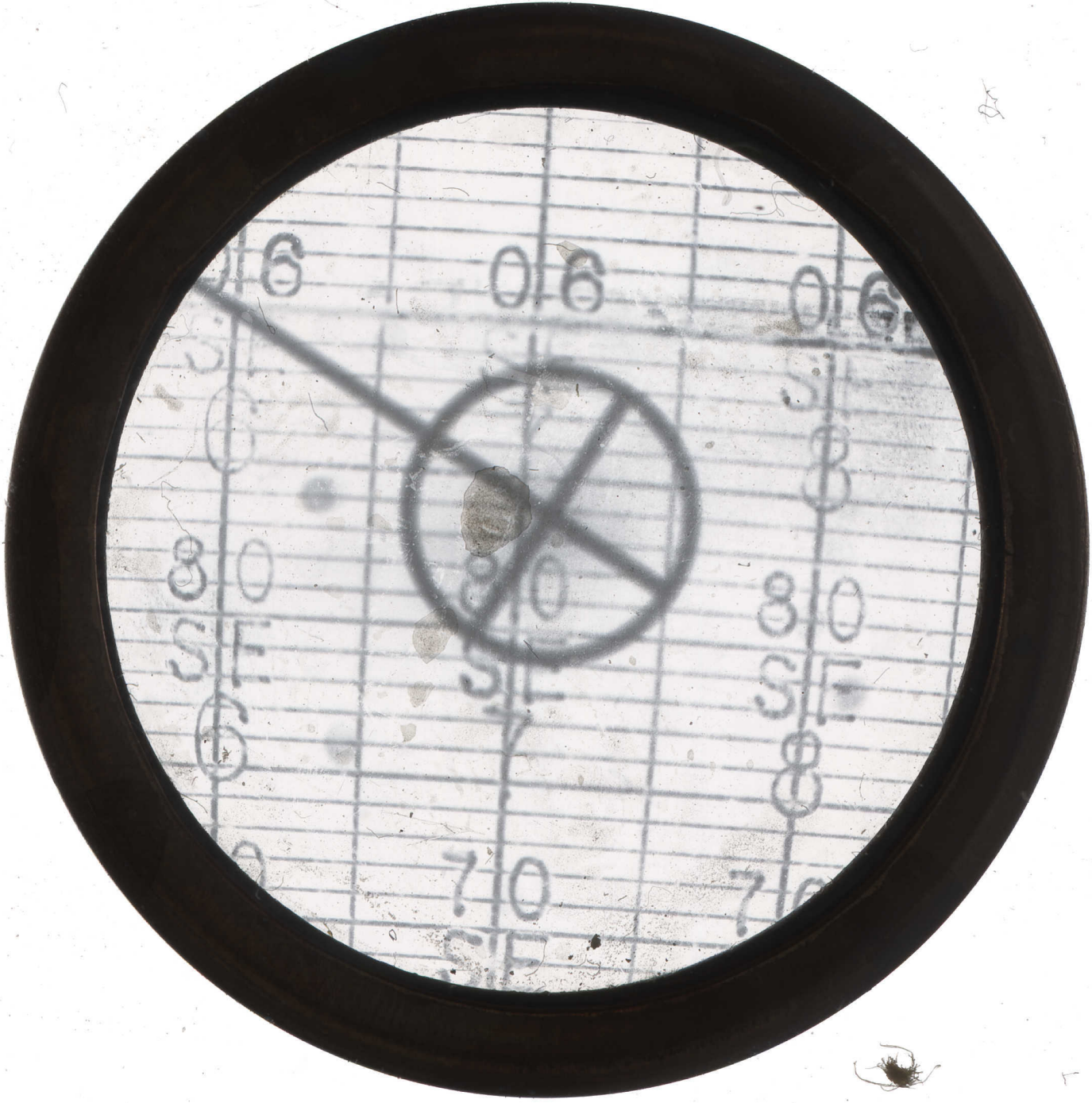
COMPANY Hecla
WELL NAME D-213-98
LEASE
TAKEN BY Hunter
DEPTH 120'
DATE 3-28-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO. 1

HI-1408

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-213-98
LEASE
TAKEN BY Hunter
DEPTH 240
DATE 3-28-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO. 6

HI-1408


06
06
06
80
80
80
70
70