60000894

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-140-97
AUTHOR	R. Parish; K. Allen; S. King
DATE OF DOC(S)	1997
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Hecla Mining Co.; North Zone; Rosebud Mining Co., LLC
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; [redacted]; total depth 140' receipt; hand written notes; photographs; down hole camera images 16 p. 3 down hole camera images

Keep docs at about 250 pages if no oversized maps attached
(for every 1 oversized page (>11x17) with text reduce
the amount of pages by ~25)

SS: DP 5/5/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

D-140-97

60000894
4010

6600 0844

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

Hecla MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER D-140-97 LOCATION NORTH ZONE REMARKS STOPE 31
PAGE 1 OF 2 NORTHING
DATE 12/10/97 EASTING
LOGGED BY R. PARISH ELEVATION
SCALE 1"=10' AZIMUTH
TOTAL DEPTH 100' INCLINATION

REC: LBT

RQD: LST

LITHOLOGY

0-24' Lt. greenish white LBT Flows w/ leopard skin texture. moderately Bleached, mild argillization. Pinkish hued stripes/streaks in white/green background.

24-50 Massive LBT Flows. Lt. greenish white. mild to mod. bleaching.

32.8-40 Weak spotted texture, white clay rich vesicle fill or incipient leopard skin texture.

Reduced

OX

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

PIMA PIMA PIMA

GRAPHIC LOG

STRUCTURE

7.7-11 mineralized? fract/vein set at 30° TCA.

29' Bx vein. Bxd c+cs, milled, matrix supported clasts.

37' Flt'd clay, Calcite vn. 10° T.CA. Rake 35°

41' Flt'd green illite vn. 40° T.C.A. Rake 80°

ALTERATION AND MINERALIZATION

0-24' Mod. bleaching, mild to mod argillization

5-11' Common Veins of marc + white kaolinite, ± green illite.

11-28.5' mod. bleaching but v. wk. argilliz., wk to minor marc + Calcite + grn illite vns

28.5-40' Mod. illite Veins and pervasive illite alt'n of ground mass adj to cracks and vns slight incr in brassy marc.

29' 1.5" Breccia Vein, 15° TCA Rk Fbvr + gray silica matrix. Minor brassy pyrite/marc.

36' Brassy Py blebs aligned like veins

36-38' Several ½" grn clay, Calcite marc. Veins w/ white kaolinite

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag
0	5					
5	7.7					
7.7	11					
11	14					
14	19					
19	24					
24	28.5					
28.5	32.8					
32.8	36.5					
36.5	40					
40	45					
45	50					

HOLE NUMBER D-140-97 PAGE 2 OF 2

SEC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
LBT		50-70 Lt. Maroon, oxidized LBT Flows. Massive, featureless, fine grained. Sharp ctc w/ Reduced rock @ 30° - occupied by calcite/green clay vn.	60	10, 35	55.3-70 joints @ 15° and 35° TCA	50-30 - v. sparse calcite ± green illite? Veinlets. Hematitic fractures and veins spaced ~ 8" apart.
		70-100 Lt. gray, Featureless, massive LBT Flows. Hematitic oxidation along Fractures, spaced about every foot. Sparse. green illite and calcite veins typically 60° and less often 25° TCA.	70, 80, 90, 100	60, 15, 45	70-100 weak joint/vein set @ ~60° TCA: Subordinate set @ ~25° TCA	70-100 sparse green illite and calcite veins, hematitic Fractures spaced ~1/ft
				EOH 100'		

OX

Red.

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
50	55.5					
55.5	60					
60	65					
65	70					
70	75					
75	80					
80	85					
85	90					
90	95					
95	100					

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-140-97 DATE: 12/10/97 LOGGED BY: R. PARISH PAGE 1 OF 2

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)
0	5	80	80	76										
5	10	100	100	42										
10	14	100	100	43										
14	24	90	90	40										
24	28.5	105	105	47										
28.5	30	113	113	60										
30	35	94	94	54										
35	40	96	96	23										
40	45	97	97	36										
45	50	100	100	11										
50	55	97	97	56										
55	60	100	100	46										
60	65	100	100	32										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-140-97 DATE: 12/10/97 LOGGED BY: R. PARISH PAGE 2 OF 2

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)
65	70	86	86	54										
70	75	100	100	87										
75	80	100	100	54										
80	85	88	88	55										
85	90	102	102	82										
90	95	100	100	85										
95	100	100	100	80										

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047685

PO BOX 11530
RENO NV.USA
Ph.(702) 356-0606, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

:

:

: NSI

CLIENT REFERENCE No: D-140-97 RECEIVED : 16 DEC 1997

NO. SAMPLES : 22 REPORTED : 31 DEC 1997

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
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

12/31/1997 15:32 7023561413 AMERICAN ASSAY LABS PAGE 07

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047685

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-140-97

REPORTED : 31 DEC 1997

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
D-140-97 0-5	0.003		0.04
D-140-97 5.0-7.7	0.001		0.03
D-140-97 7.7-11.0	0.004		0.05
D-140-97 11-14	0.010		0.03
D-140-97 14-19	<0.001		<0.02
D-140-97 19-24	<0.001		<0.02
D-140-97 24.0-28.5	0.001		<0.02
D-140-97 28.5-32.8	0.020		0.05
D-140-97 32.8-36.5	0.006		0.06
D-140-97 36.5-40.0	0.002		0.03
D-140-97 40-45	<0.001		<0.02
D-140-97 45-50	<0.001		<0.02
D-140-97 50.0-55.5	<0.001		<0.02
D-140-97 55.5-60.0	<0.001		<0.02
D-140-97 60-65	<0.001		<0.02
D-140-97 65-70	<0.001		<0.02
D-140-97 70-75	<0.001		<0.02
D-140-97 75-80	<0.001		<0.02
D-140-97 80-85	<0.001		<0.02
D-140-97 85-90	<0.001		<0.02
D-140-97 90-95	<0.001		<0.02
D-140-97 95-100	<0.001		<0.02

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 0047685-IN
INVOICE DATE: 12/31/97

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-140-97	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
22	SAMPLES RECEIVED	.00	.00
22	DRYING	1.00	22.00
22	JAW CRUSHING CHARGE	1.30	28.60
22	COARSE MILLING CHARGE	4.50	99.00
22	SPLITTING CHARGE	2.40	52.80
22	RING MILLING CHARGE	2.00	44.00
22	Au (1 A.T. FIRE ASSAY)	8.00	176.00
22	HYDROCHLORIC/NITRIC DIGESTION	2.00	44.00
22	Ag ANALYSES	1.00	22.00

86-5110-477
EDA

NET INVOICE:	488.40
LESS DISCOUNT:	97.68
FREIGHT:	.00
INVOICE TOTAL:	390.72

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP047685

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-140-97

No. SAMPLES : 22

MAIN SAMPLE TYPE : DRILL CORE

RECEIVED : 16 DEC 1997

REPORTED : 31 DEC 1997

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Au(RZ)	FA30	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP047685

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-140-97

REPORTED : 31 DEC 1997

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
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D-140-97 5.0-7.7	0.001		0.03
D-140-97 7.7-11.0	0.004		0.05
D-140-97 11-14	0.010		0.03
D-140-97 14-19	<0.001		<0.02
D-140-97 19-24	<0.001		<0.02
D-140-97 24.0-28.5	0.001		<0.02
D-140-97 28.5-32.8	0.020		0.05
D-140-97 32.8-36.5	0.006		0.06
D-140-97 36.5-40.0	0.002		0.03
D-140-97 40-45	<0.001		<0.02
D-140-97 45-50	<0.001		<0.02
D-140-97 50.0-55.5	<0.001		<0.02
D-140-97 55.5-60.0	<0.001		<0.02
D-140-97 60-65	<0.001		<0.02
D-140-97 65-70	<0.001		<0.02
D-140-97 70-75	<0.001		<0.02
D-140-97 75-80	<0.001		<0.02
D-140-97 80-85	<0.001		<0.02
D-140-97 85-90	<0.001		<0.02
D-140-97 90-95	<0.001		<0.02
D-140-97 95-100	<0.001		<0.02

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CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-140-97

REPORTED : 31 DEC 1997

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D-140-97 7.7-11.0	0.004		0.05
D-140-97 11-14	0.010		0.03
D-140-97 14-19	<0.001		<0.02
D-140-97 19-24	<0.001		<0.02
D-140-97 24.0-28.5	0.001		<0.02
D-140-97 28.5-32.8	0.020		0.05
D-140-97 32.8-36.5	0.006		0.06
D-140-97 36.5-40.0	0.002		0.03
D-140-97 40-45	<0.001		<0.02
D-140-97 45-50	<0.001		<0.02
D-140-97 50.0-55.5	<0.001		<0.02
D-140-97 55.5-60.0	<0.001		<0.02
D-140-97 60-65	<0.001		<0.02
D-140-97 65-70	<0.001		<0.02
D-140-97 70-75	<0.001		<0.02
D-140-97 75-80	<0.001		<0.02
D-140-97 80-85	<0.001		<0.02
D-140-97 85-90	<0.001		<0.02
D-140-97 90-95	<0.001		<0.02
D-140-97 95-100	<0.001		<0.02

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

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1500 Glendale Ave.
Nevada 89431
Box 11530
Reno, NV 89510
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2320 Last Chance Rd.
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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: ROSELAND MINING INC

Address: P.O. BOX 2610

City WINNEMUCCA State NV Zip 89446

Telephone Number: ( ) [illegible] Fax Number: ( ) [illegible]

Project Name: DEVELOPMENT Purchase Order Number: _____

Date Submitted: 12/15/97 Number of Samples: 22

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

SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED
D140-97			Au/Ag as per Roseland Development method.
0-5	55.5-60		
5-7.7	60-65		
7.7-11	65-70		
11-14	70-75		
14-19	75-80		
19-24	80-85		
24-28.5	85-90		
28.5-32.8	90-95		
32.8-36.5	95-100		
36.5-40			
40-45			
45-50			
50-55.5			

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:

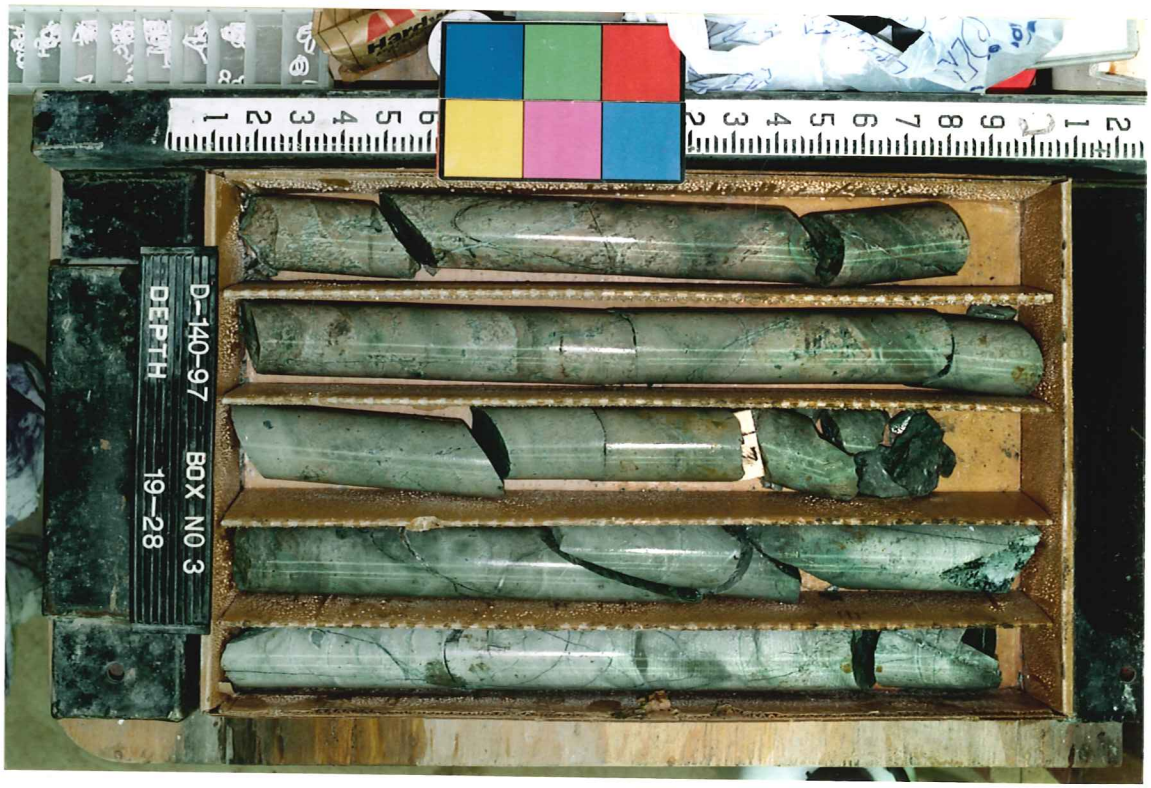
CLIENT FILE COPY

DOWNHOLE SURVEY D-140-97 Declination 15.7°

FILM FOOTAGE	BEARING	DIP	TRUE BEARING	TRUE DIP
COLLAR	N 76 W	0°	60.3 –	-90°
50	S 79 W	0°	63.3 –	-90°
100	N 81 W	1°	65.3	-89°

D-140-97 BOX NO 2
DEPTH 9.5-19

D-140-97 BOX NO 1
DEPTH 0-9.5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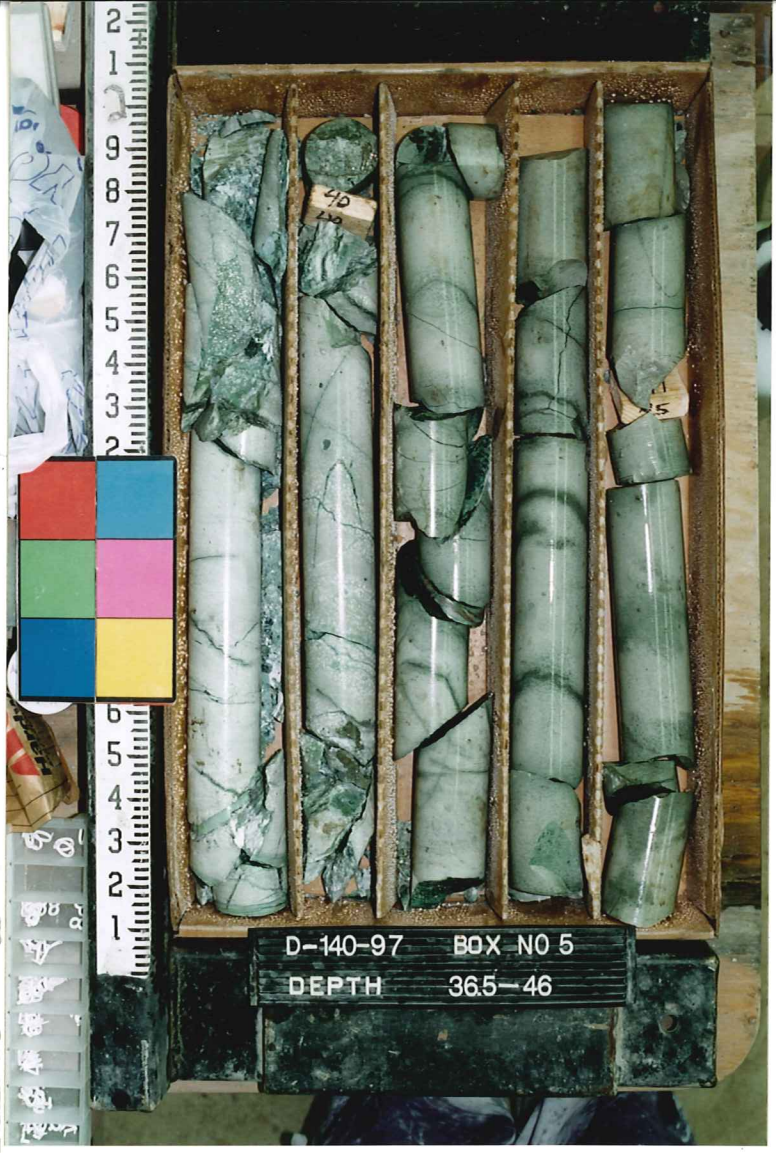
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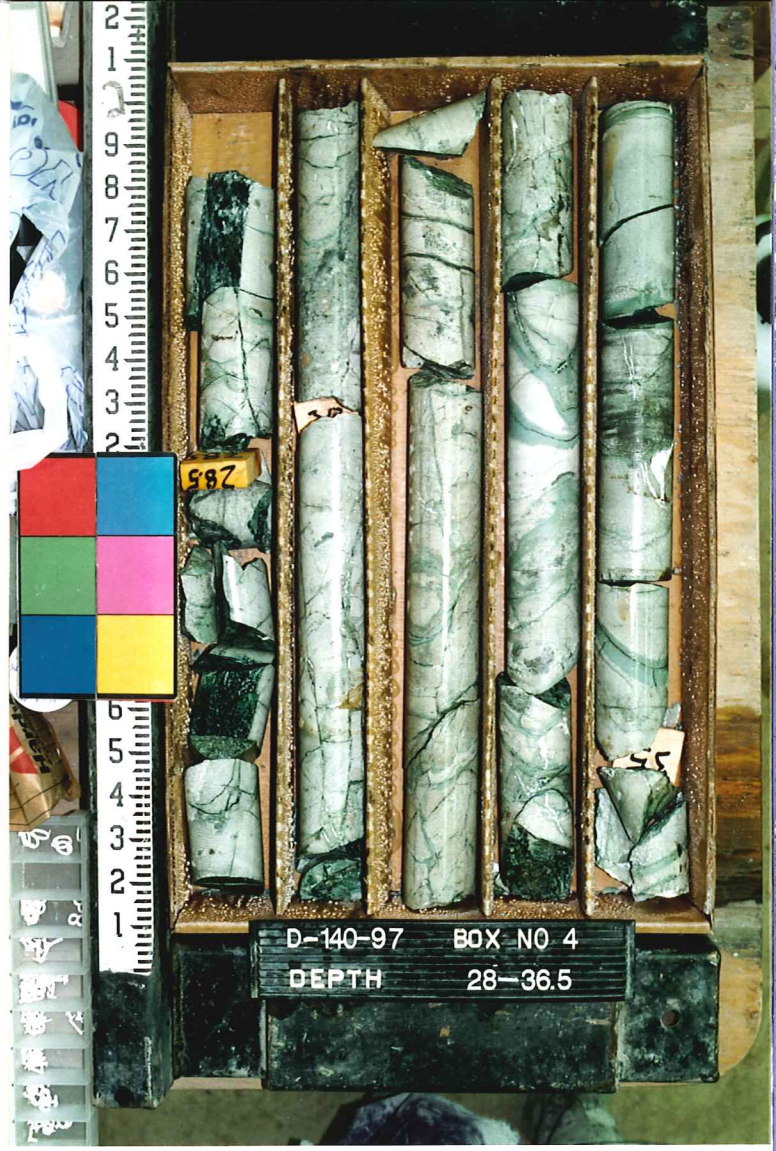
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D-140-97 BOX NO 8
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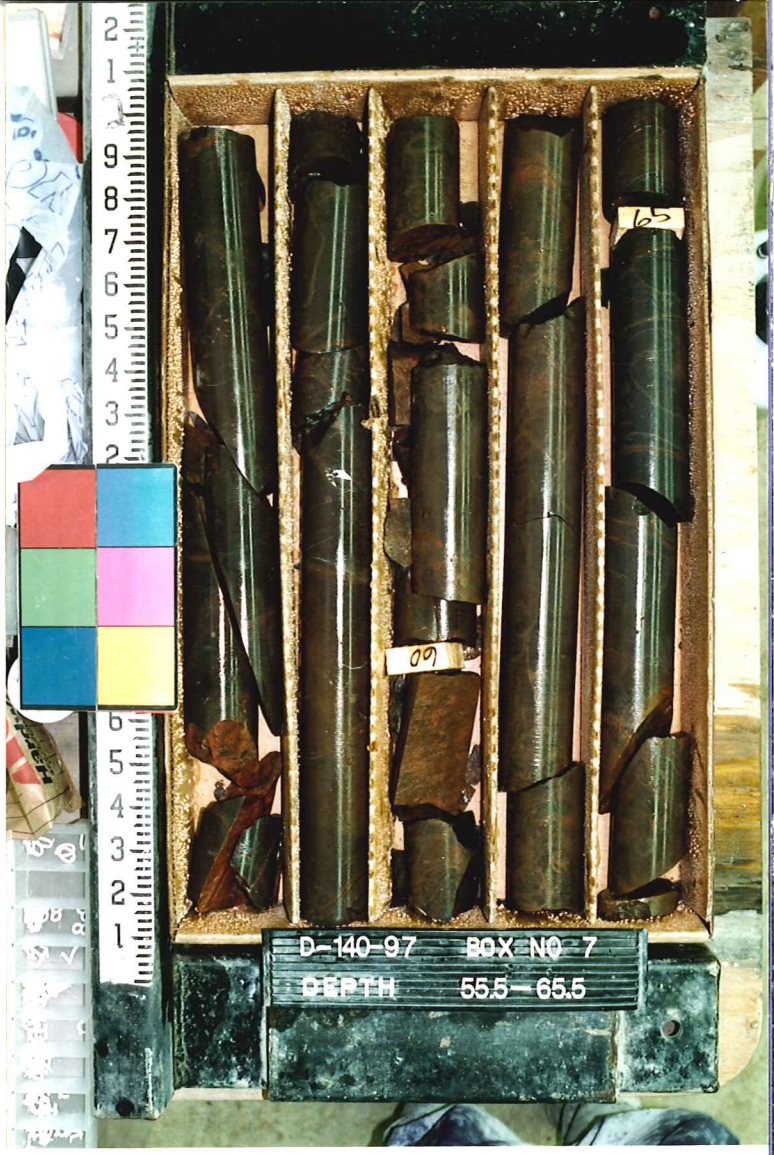
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DEPTH 75-85

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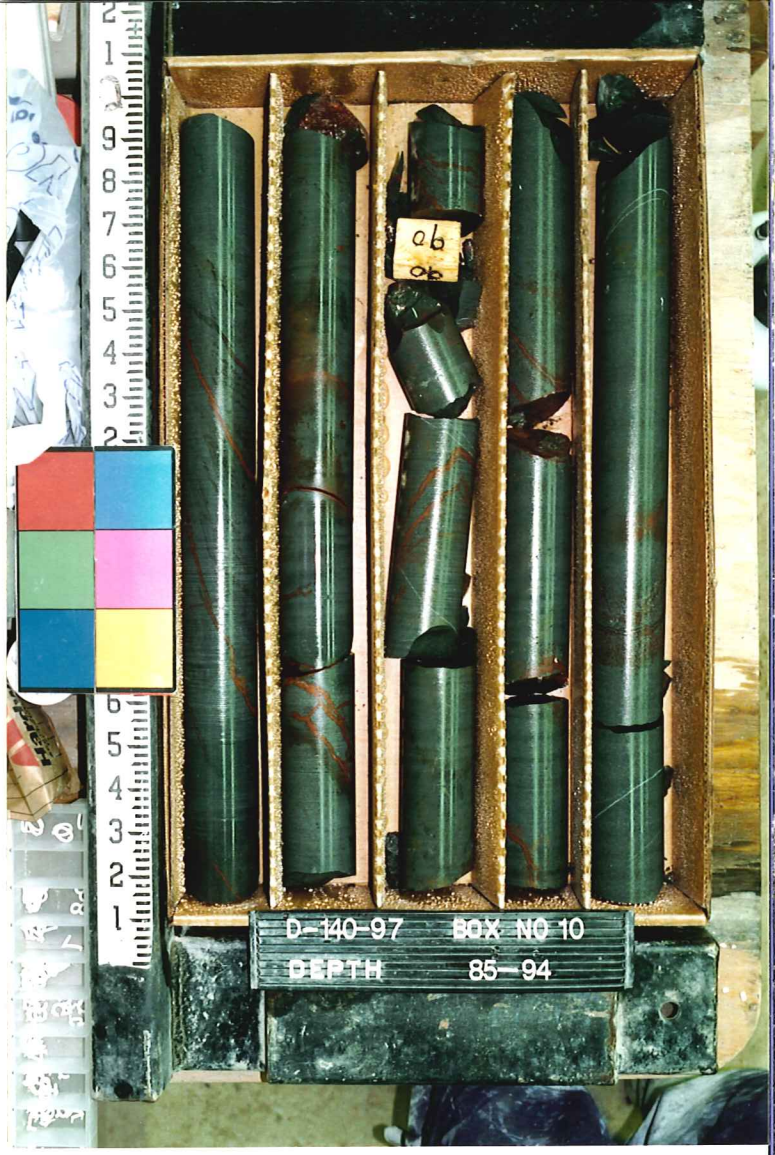
D-140-97 BOX NO 11
DEPTH 94-100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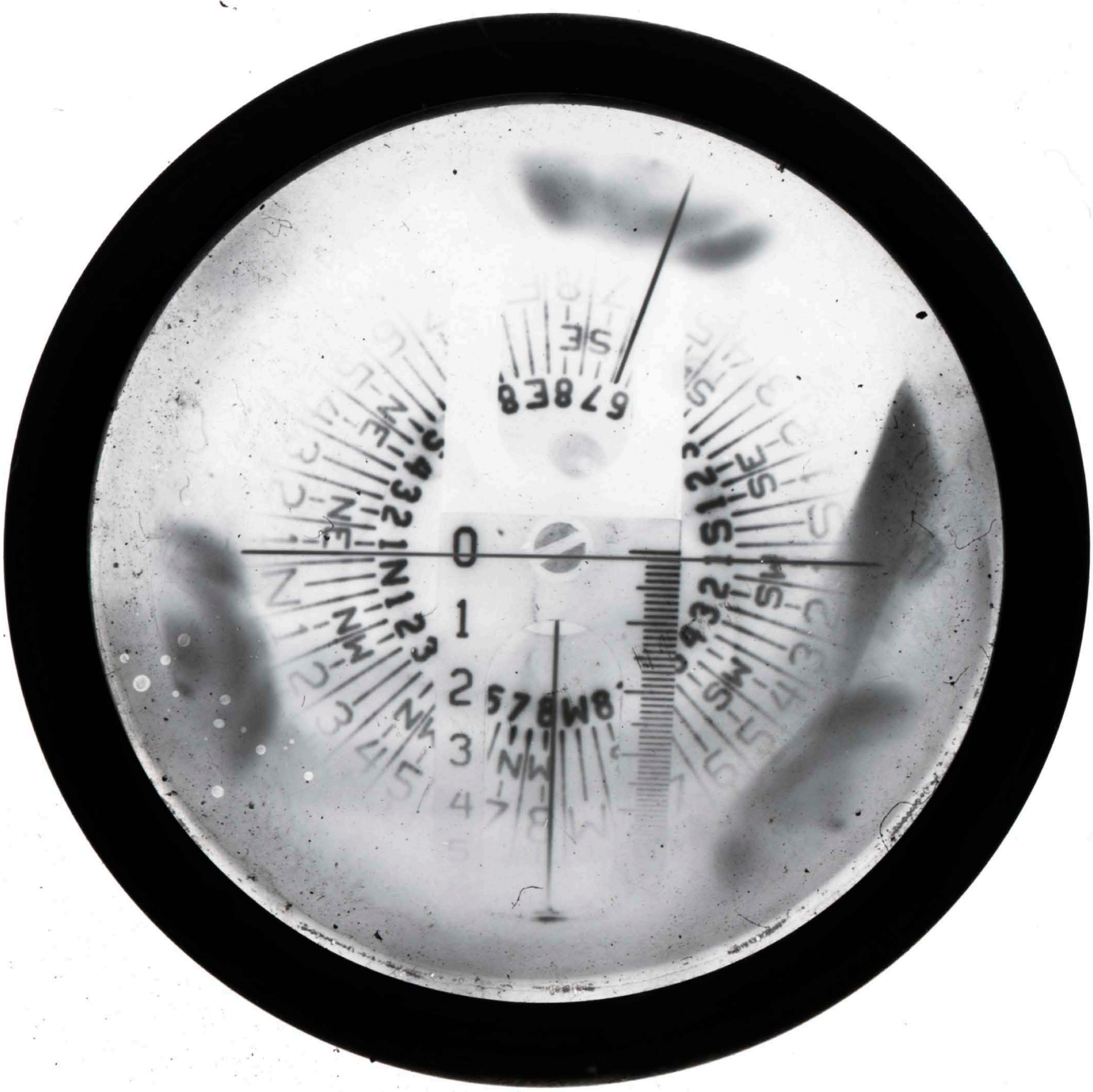
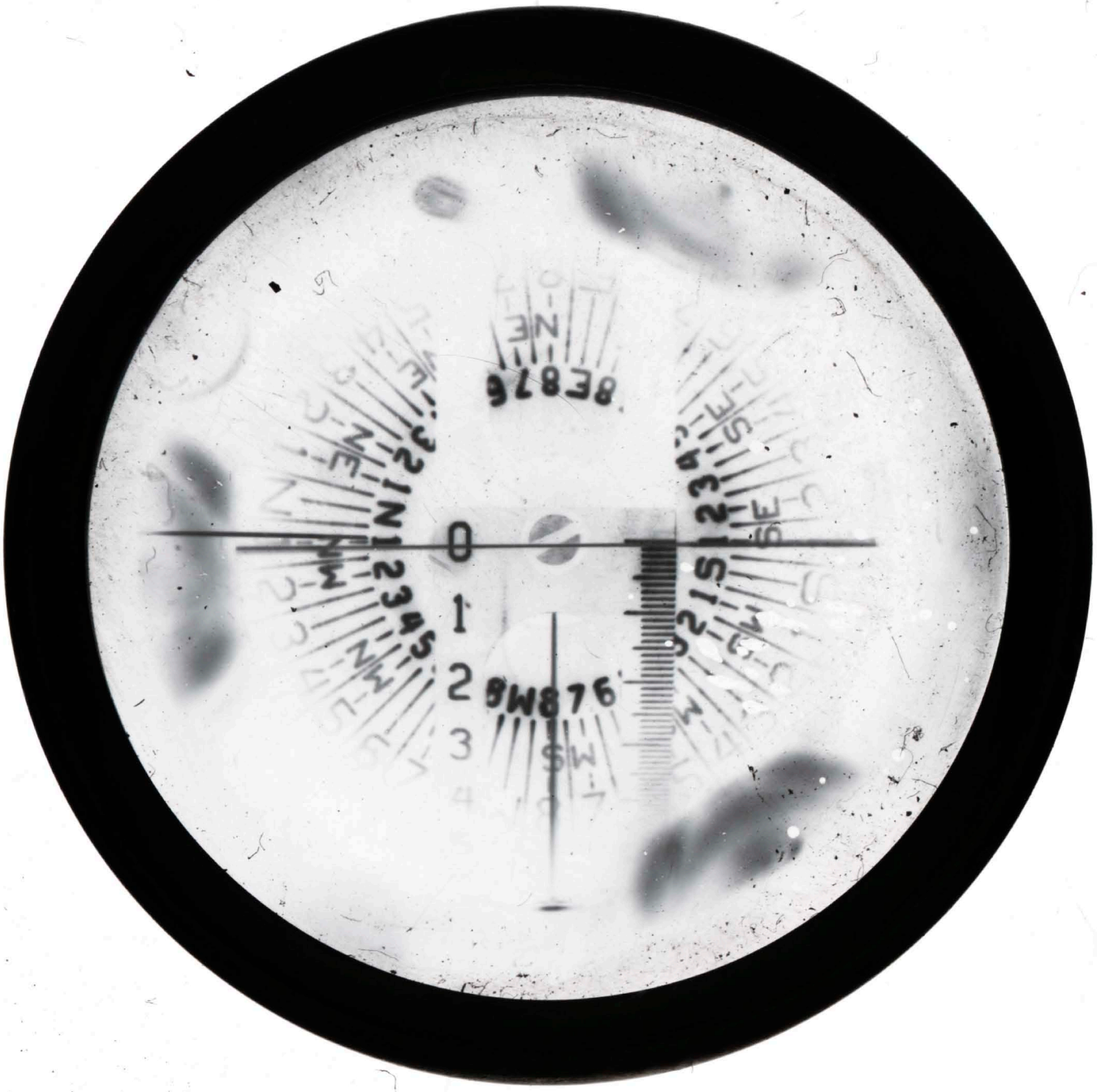
DEPTH 85-94

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