6000 0666

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-181-98
AUTHOR	K. Allen; B Morris; 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, Hecla Mining Co, Rosebud Project Rosebud Mining Co., LLC
COMMODITY If not obvious	gold; silver
NOTES	drill logs; assay; geology; photographs; receipts; total depth 200'; handwritten notes down hole camera images 27 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: DD 4/28/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

D-181-98

6000 0666
4010

52.6

6000 0666

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-181-98	LOCATION	East Zone Stope 43 Panel 1450
PAGE 1 OF 4		NORTHING	
DATE	2-22-98	EASTING	
LOGGED BY	Brian W. Morris	ELEVATION	
SCALE	1" = 10'	AZIMUTH	N54W
TOTAL DEPTH		INCLINATION	0

REMARKS

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG (Struc, Alt)	STRUCTURE	ALTERATION AND MINERALIZATION
	Ox/red mix	0-53.0' Lt gray fg autobrecciated Dozer rhy	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	10°	9.0-10.3 Gougy clayey milled BXA, Str Oxidation	2.0'-28 Mod-locally str st of Autobx clasts locally Mtx str Fel>st than clasts, Sulf part. Oxidized wk-Mod argil, wk-mod red/ox mix Vnlets + hairline vns, locally minor barite xls on fx surfaces + Marc xls
	Reduced				46-54.3 Strong Fxing & wk-Mod leaching along Fx, Bright brassy Marc. in vugs.	28-30 Strong hairline & fine stkwk of sulf, str sulf soaked patches.
						46-54.3 Strong Vert Silica Vns w/ str leaching, v. str blk sulf? hairline vns w/ dendritic growth pattern, small silic bxa vns w/ blk specks in Mtx

ANALYTICAL DATA

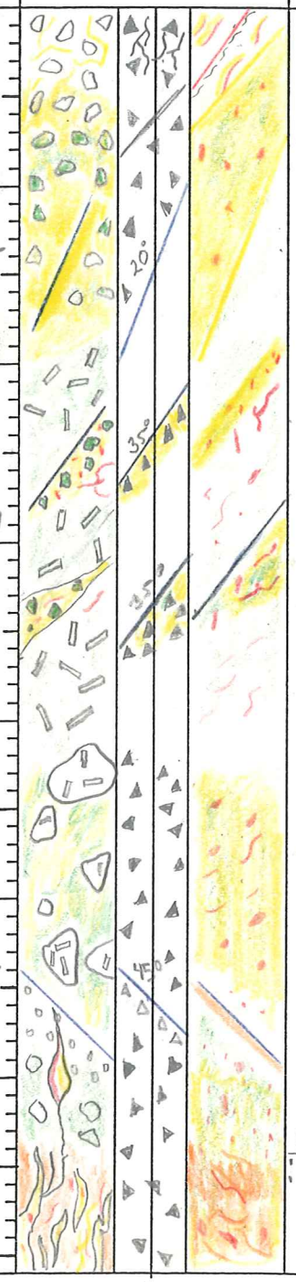
FROM	TO	W	Au	Ag	Au2	Ac
0	5.0					
5.0	9.0					
9.0	10.5					
10.5	15.0					
15.0	20.0					
20.0	25.0					
25.0	30.0					
30.0	35.0					
35.0	40.0					
40.0	45.0					
45.0	46.0					
46.0	50.0					

HOLE NUMBER D-181-98 PAGE 2 OF 4

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG (Lith, Struc, Alt)	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	53.0' Dozer / Felsic Porphyry Contact Wh Felsic anhedral-Euhedral phenos w/ Lt gray aphan groundmass Mtx, phenos commonly have ragged edges prob. alt feature. Maybe Bud Marker Bed. 71.3' Angular Volcaniclastic (Bud?) Clast 3cm dia Pima 78' Pima 85.8' Pima 90' 108.7'-140' South Ridge Fault Zone 108.7-113.5' Porph is brecciated & healed by a rock flour + silica mtx; Later dk gry - clear silica ± sulf 113.5 - 115.3 Milled Breccia: Lt gry rounded rhy porph clasts healed by dk gry rock flour ± silica Mtx.	55 60 65 70 75 80 85 90 95 100 105 110 115 120	35° 55° BXA VASS°	53.0' Sharp Contact 75.5-99.0' Strong dk gry silica ± fg sulf ± Marc ± wh clay Veining + stkwk, locally strong 1-4" wide silica healed rubble bxa vns. 90-99.0' Strong Fxing & Clay coating & Fillings.	53-80' 55-60' Mod dk gry silica Vns & stkwk ± fg sulf & bladed marc, Mod sulf soaked blebs & Patches. 75.5-99.0' Vns + stkwk Mod-Str leaching replaced by wh clay + bladed Marc, locally wk barite in vugs. 80-99' Rx becoming less bleached & darker gry but more (mod.) argillized. 105-107 Mod dk gry sulfidic + silica Vn w/ locally Str Silica lined + marc vugs. 113.5-115.3 BXA Mtx becoming darker gray.

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	
50	55					
55	60					
60	65					
65	70					
70	75					
75	80					
80	85					
85	90					
90	95					
95	100					
100	105					
105	108.7					
108.7	113.5					
113.5	115.3					
115.3	120.0					

HOLE NUMBER D-181-98 PAGE 3 OF 4

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	120 - 127.8' Rubble to milled Breccia; Lt gry to Lt gr gry felsic porph clast w/ gry silic mtx. 127.8 - 139.3 Milled Breccia: Well rounded clasts of wh fg equigranular tuff (Dozer?) & or Volcaniclastic tuff (Bud?). Supported by gr-gry-wh silica mtx. 139.3 - Porph Lt tan fg equigranular ground mass w/ wh raggiz-edged felsic phenos Pima Sample Pima	125 130 135 140 145 150 155 160 165 170 175 180 185 190		120 - 127.8' Porph looks like it went through earlier tect. event clasts are composed of milled bxa healed by Rx flour mtx. w/ later gry silica flooding & healing of Fx S. Rdg Flt 135.6' Wh silica w/ slicken surface 144.5 - 146.7' Rubble bxa vn; rounded porph clast .5cm-16cm in dia healed by milky gry silica mtx. 153 - 156.2' Mosaic - Rubble bxa vn; Rounded felsic porph clasts w/ milky gry silica mtx, locally milled bxa mtx 161.5 - 170.2' Rubble BxA: Subrounded felsic porph clasts supported by silica mtx 171.5 - 176.6 Milled BxA: rounded felsic clasts in gougy Rx flour mtx 176 - 184.6 Str silic + chlor alt. 184.6 - 200' Crackle BXA: Lt tan gry fg equigranular clasts healed by gry silica	Strong silic, wk vugs ± marc & wh clay coating, wk diss sulf. 127.8 - 139.3 Completely silica flooded; wk leaching wk diss sulf, wk sulf blebs & patches, wk-mod chlor alt. 138.8 - 139.3 Str stibnite + wh clay filled vugs. 139.3 - 153.0' wk argil, locally str chlor, wk-mod sulf blebs & pheno replacement, [illegible] 153 - 156.2' wk sulf blebs, locally mod chlor alt of clasts & along Fx. 161.5 - 170.2' Silica mtx is str chlo alt w/ minor diss sulf + sulf blebs, mod leaching of mtx w/ wh clay ± stibnite replacement, chlor ± wh ± sulf replacement of phenos. 171.5 - 176.6 strong argil + bleaching of mtx, str chlor alt of clasts, wk diss sulf 179 - 200 Mod leaching w/ stibnite ± wh clay filled vugs. 184.6 - 200' Mod orbr - bw FeOx st.

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
120.0	125.0				
125.0	127.8				
127.8	130.0				
130.0	134.0				
134.0	138.0				
138.0	139.3				
139.3	144.5				
144.5	146.7				
146.7	150				
150.0	153.0				
153.0	156.2				
156.2	160.0				
160.0	161.5				
161.5	165.0				
165.0	170.0				
170.0	171.5				
171.5	176.6				
176.6	180.0				
180.0	184.6				
184.6	190.0				

HOLE NUMBER D-181-98 PAGE 4 OF 4

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
			195				190	195				
		T.D. 200'	200			197-200' Str leaching of silica matrix + vuleti replaced w/ wh clay + stibnite	195	200				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-181-98 DATE: 2-22-98 LOGGED BY: Brian W. Morris PAGE 1 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)
0	5	96	96	87										
5	10	96	96	89										
10	15	90	90	84										
15	20	94	94	87										
20	30	95	95	78										
30	40	90	90	96										
40	50	95	95	82										
50	55	98	98	65										
55	60	90	90	84										
60	70	88	88	47										
70	80	95	95	76										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-181-98 DATE: 2-22-98 LOGGED BY: BWM 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)
80	90	95	95	64										
90	100	91	91	59										
100	110	100	100	90										
110	120	97	97	95										
120	130	89	89	52										
130	134	100	100	60										
134	140	100	100	83										
140	150	94	94	90										
150	160	89	89	87										
160	170	95	95	75										
170	180	86	86	0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-181-98 DATE: LOGGED BY: BWM 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)
180	190	90	90	46										
190	200	98	98	61										

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048253

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-181-98 RECEIVED : 6 MAR 1998

No. SAMPLES : 50 REPORTED : 16 MAR 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 SP048253

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-181-98

REPORTED : 16 MAR 1998

SAMPLES		Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)	
D-181-98 0-5		0.005			0.04	
D-181-98 5-9		0.003			0.03	
D-181-98 9.0-10.5		0.007			0.07	
D-181-98 10.5-15.0		0.019			0.06	
D-181-98 15-20		0.006			0.06	
D-181-98 20-25		0.004			0.04	
D-181-98 25-30		0.003			0.03	
D-181-98 30-35		0.009			0.03	
D-181-98 35-40		0.009			0.05	
D-181-98 40-45		0.042	0.025		0.04	
D-181-98 45-46		0.022	0.028		0.06	
D-181-98 46-50		0.055		0.058	0.08	
D-181-98 50-55		0.122		0.136	0.28	
D-181-98 55-60		0.040	0.033		0.07	
D-181-98 60-65		0.122		0.107	0.11	
D-181-98 65-70		0.025	0.034		0.06	
D-181-98 70-75		0.067		0.096	0.12	80-134'
D-181-98 75-80		0.137		0.120	0.32	=54' @
D-181-98 80-85	5	0.192		0.140	0.16	
D-181-98 85-90	5	0.147		0.120	0.64	0.243 Au
D-181-98 90-95	5	0.178		0.139	0.19	0.49 Ag
D-181-98 95-100	5	0.037			0.19	
D-181-98 100-105	5	0.084		0.087	0.14	
D-181-98 105.0-108.7	3.7	0.228		0.258	1.32	
D-181-98 108.7-113.5	4.8	0.393		0.473	1.97	

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048253

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-181-98

REPORTED : 16 MAR 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-181-98 113.5-115.3 1.8	0.908	1.038	0.802	0.22
D-181-98 115.3-120.0 4.7	0.119		0.131	0.13
D-181-98 120-125 5	0.161		0.190	0.11
D-181-98 125.0-127.8 2.8	0.302		0.329	0.77
D-181-98 127.8-130.0 2.2	1.158		1.071	0.42
D-181-98 130-134 4	0.203		0.167	0.21
D-181-98 134-138	0.017	0.016		0.11
D-181-98 138.0-139.3	0.004			0.24
D-181-98 139.3-144.5	0.003			0.14
D-181-98 144.5-146.7	0.004			0.18
D-181-98 146.7-150.0	0.003			0.08
D-181-98 150-153	0.003			0.15
D-181-98 153.0-156.2	0.003			0.34
D-181-98 156.2-160.0	0.003			0.06
D-181-98 160.0-161.5	0.004			0.17
D-181-98 161.5-165.0	0.005			0.38
D-181-98 165-170	0.004			0.13
D-181-98 170.0-171.5	0.002			0.07
D-181-98 171.5-176.6	0.006			0.46
D-181-98 176.6-180.0	0.005			0.35
D-181-98 180.0-184.6	0.002			0.22
D-181-98 184.6-190.0	0.004			0.28
D-181-98 190-195	0.004			0.39
D-181-98 195-200	0.004			0.17
27757	0.542			3.21

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 0048253-IN
INVOICE DATE: 03/17/98

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-181-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
50	SAMPLES RECEIVED	.00	.00
49	DRYING	1.00	49.00
49	JAW CRUSHING CHARGE	1.30	63.70
49	COARSE MILLING CHARGE	4.50	220.50
49	SPLITTING CHARGE	2.40	117.60
49	RING MILLING CHARGE	2.00	98.00
50	Au (1 A.T. FIRE ASSAY)	8.00	400.00
17	Au ANALYSES/GRAVIMETRIC	8.75	148.75
50	HYDROCHLORIC/NITRIC DIGESTION	2.00	100.00
50	Ag ANALYSES	1.00	50.00
1	Ag (ore grade) ANALYSES	5.00	5.00

86-5110-477
RDA

NET INVOICE:	1,252.55
LESS DISCOUNT:	250.51
FREIGHT:	.00
INVOICE TOTAL:	1,002.04

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048253

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-181-98 RECEIVED : 6 MAR 1998

No. SAMPLES : 50 REPORTED : 16 MAR 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 SP048253

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-181-98

REPORTED : 16 MAR 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-181-98 0-5	0.005			0.04
D-181-98 5-9	0.003			0.03
D-181-98 9.0-10.5	0.007			0.07
D-181-98 10.5-15.0	0.019			0.06
D-181-98 15-20	0.006			0.06
D-181-98 20-25	0.004			0.04
D-181-98 25-30	0.003			0.03
D-181-98 30-35	0.009			0.03
D-181-98 35-40	0.009			0.05
D-181-98 40-45	0.042	0.025		0.04
D-181-98 45-46	0.022	0.028		0.06
D-181-98 46-50	0.055		0.058	0.08
D-181-98 50-55	0.122		0.136	0.28
D-181-98 55-60	0.040	0.033		0.07
D-181-98 60-65	0.122		0.107	0.11
D-181-98 65-70	0.025	0.034		0.06
D-181-98 70-75	0.067		0.096	0.12
D-181-98 75-80	0.137		0.120	0.32
D-181-98 80-85	0.192		0.140	0.16
D-181-98 85-90	0.147		0.120	0.64
D-181-98 90-95	0.178		0.139	0.19
D-181-98 95-100	0.037			0.19
D-181-98 100-105	0.084		0.087	0.14
D-181-98 105.0-108.7	0.228		0.258	1.32
D-181-98 108.7-113.5	0.393		0.473	1.97

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048253

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-181-98

REPORTED : 16 MAR 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-181-98 113.5-115.3	0.908	1.038	0.802	0.22
D-181-98 115.3-120.0	0.119		0.131	0.13
D-181-98 120-125	0.161		0.190	0.11
D-181-98 125.0-127.8	0.302		0.329	0.77
D-181-98 127.8-130.0	1.158		1.071	0.42
D-181-98 130-134	0.203		0.167	0.21
D-181-98 134-138	0.017	0.016		0.11
D-181-98 138.0-139.3	0.004			0.24
D-181-98 139.3-144.5	0.003			0.14
D-181-98 144.5-146.7	0.004			0.18
D-181-98 146.7-150.0	0.003			0.08
D-181-98 150-153	0.003			0.15
D-181-98 153.0-156.2	0.003			0.34
D-181-98 156.2-160.0	0.003			0.06
D-181-98 160.0-161.5	0.004			0.17
D-181-98 161.5-165.0	0.005			0.38
D-181-98 165-170	0.004			0.13
D-181-98 170.0-171.5	0.002			0.07
D-181-98 171.5-176.6	0.006			0.46
D-181-98 176.6-180.0	0.005			0.35
D-181-98 180.0-184.6	0.002			0.22
D-181-98 184.6-190.0	0.004			0.28
D-181-98 190-195	0.004			0.39
D-181-98 195-200	0.004			0.17
27757	0.542			3.21

xAMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP048253

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-181-98 RECEIVED : 6 MAR 1998

No. SAMPLES : 50 REPORTED : 16 MAR 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 SP048253

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-181-98

REPORTED : 16 MAR 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-181-98 0-5	0.005			0.04
D-181-98 5-9	0.003			0.03
D-181-98 9.0-10.5	0.007			0.07
D-181-98 10.5-15.0	0.019			0.06
D-181-98 15-20	0.006			0.06
D-181-98 20-25	0.004			0.04
D-181-98 25-30	0.003			0.03
D-181-98 30-35	0.009			0.03
D-181-98 35-40	0.009			0.05
D-181-98 40-45	0.042	0.025		0.04
D-181-98 45-46	0.022	0.028		0.06
D-181-98 46-50	0.055		0.058	0.08
D-181-98 50-55	0.122		0.136	0.28
D-181-98 55-60	0.040	0.033		0.07
D-181-98 60-65	0.122		0.107	0.11
D-181-98 65-70	0.025	0.034		0.06
D-181-98 70-75	0.067		0.096	0.12
D-181-98 75-80	0.137		0.120	0.32
D-181-98 80-85	0.192		0.140	0.16
D-181-98 85-90	0.147		0.120	0.64
D-181-98 90-95	0.178		0.139	0.19
D-181-98 95-100	0.037			0.19
D-181-98 100-105	0.084		0.087	0.14
D-181-98 105.0-108.7	0.228		0.258	1.32
D-181-98 108.7-113.5	0.393		0.473	1.97

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048253

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-181-98

REPORTED : 16 MAR 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-181-98 113.5-115.3	0.908	1.038	0.802	0.22
D-181-98 115.3-120.0	0.119		0.131	0.13
D-181-98 120-125	0.161		0.190	0.11
D-181-98 125.0-127.8	0.302		0.329	0.77
D-181-98 127.8-130.0	1.158		1.071	0.42
D-181-98 130-134	0.203		0.167	0.21
D-181-98 134-138	0.017	0.016		0.11
D-181-98 138.0-139.3	0.004			0.24
D-181-98 139.3-144.5	0.003			0.14
D-181-98 144.5-146.7	0.004			0.18
D-181-98 146.7-150.0	0.003			0.08
D-181-98 150-153	0.003			0.15
D-181-98 153.0-156.2	0.003			0.34
D-181-98 156.2-160.0	0.003			0.06
D-181-98 160.0-161.5	0.004			0.17
D-181-98 161.5-165.0	0.005			0.38
D-181-98 165-170	0.004			0.13
D-181-98 170.0-171.5	0.002			0.07
D-181-98 171.5-176.6	0.006			0.46
D-181-98 176.6-180.0	0.005			0.35
D-181-98 180.0-184.6	0.002			0.22
D-181-98 184.6-190.0	0.004			0.28
D-181-98 190-195	0.004			0.39
D-181-98 195-200	0.004			0.17
27757	0.542			3.21

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

Sparks Office
1500 Glendale Ave.
Nevada 89431
Box 11530
Reno, NV 89510
Telephone
(702) 356-0606
Fax
(702) 356-1413

Tucson Office
2775 E. Ganley
Tucson, AZ 85706
Telephone
(520) 294-8078
Fax
(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. LTD

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: 03/04/98 Number of Samples: 48

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

D-181-98 SAMPLE IDENTIFICATION			TYPE	ELEMENTS REQUIRED
0.0-5.0	65.0-70.0		CORE	AU-AG ACCORDING TO
5.0-9.0	70.0-75.0	130.0-134.0		ROSEBUD MINE
9.0-10.5	75.0-80.0	134.0-138.0		PROTOCOL
10.5-15.0	80.0-85.0	138.0-139.3		176.6-180.0
15.0-20.0	85.0-90.0	139.3-144.5		180.0-184.6
20.0-25.0	90.0-95.0	144.5-146.7		184.6-190.0
25.0-30.0	95.0-100.0	146.7-150		190-195
30.0-35.0	100.0-105.0	150-153.0		195-200
35.0-40.0	105.0-108.7	153.0-156.2		
40.0-45.0	108.7-113.5	156.2-160.0		
45.0-46.0	113.5-115.3	160.0-161.5		
46.0-50.0	115.3-120.0	161.5-165.0		
50.0-55.0	120.0-125.0	165.0-170.0		
55.0-60.0	125.0-127.8	170.0-171.5		
60.0-65.0	127.8-130.0	171.5-176.6		

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:

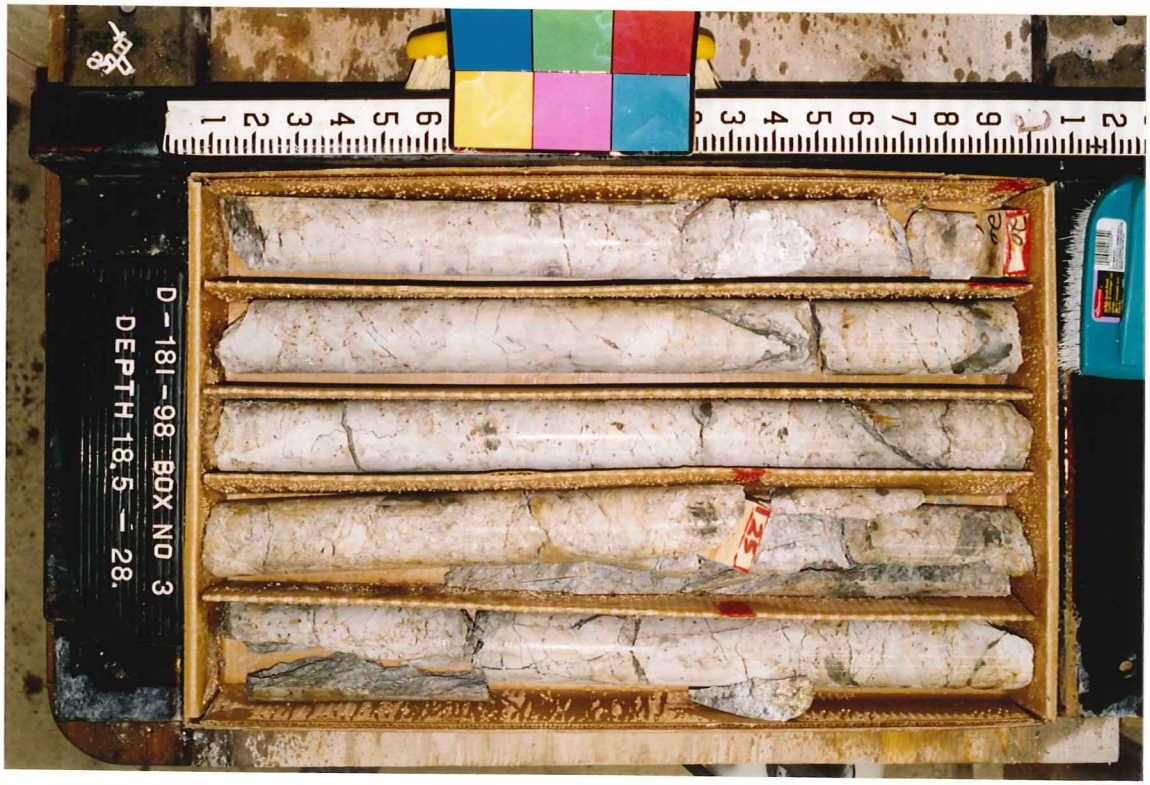
CLIENT FILE COPY

DOWNHOLE SURVEY MAGNETIC DECLINATION: 15.7°

DRILLHOLE #	FILM FOOTAGE	BEARING	DIP	TRUE BEARING	TRUE DIP
D-181-98	COLLAR	S 72.0°E	91.0°	N56.3°W	-1.0°
	~~95'~~ 100'	S 72.0°E	91.0°	N56.3°W	-1.0°
	~~170'~~ 200'	S 73.0°E	91.0°	N57.3°W	-1.0°

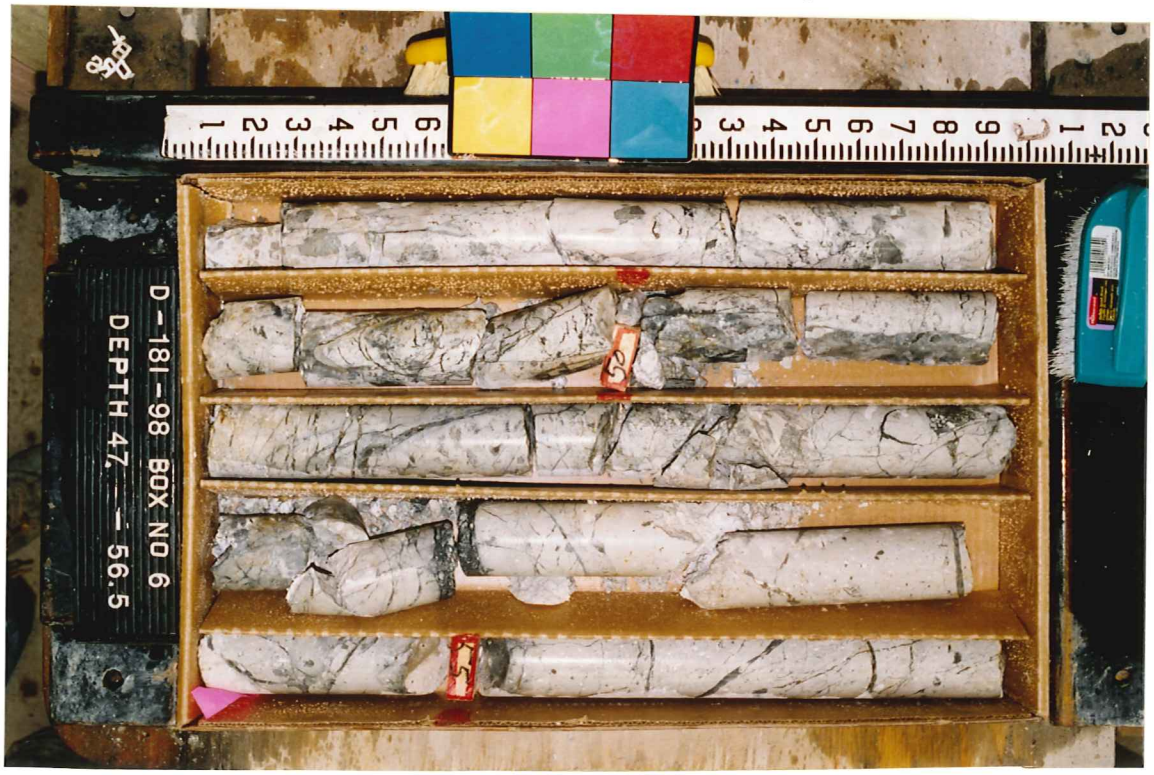
D-181-98 BOX NO 2
DEPTH 9.5 - 18.5

D-181-98 BOX NO 1
DEPTH 0.0 - 9.5


D-181-98 BOX NO 3
DEPTH 18.5 - 28.

D-181-98 BOX NO 5
DEPTH 37.5 - 47.

D-181-98 BOX NO 4
DEPTH 28. - 37.5


D-181-98 BOX NO 6
DEPTH 47. - 56.5

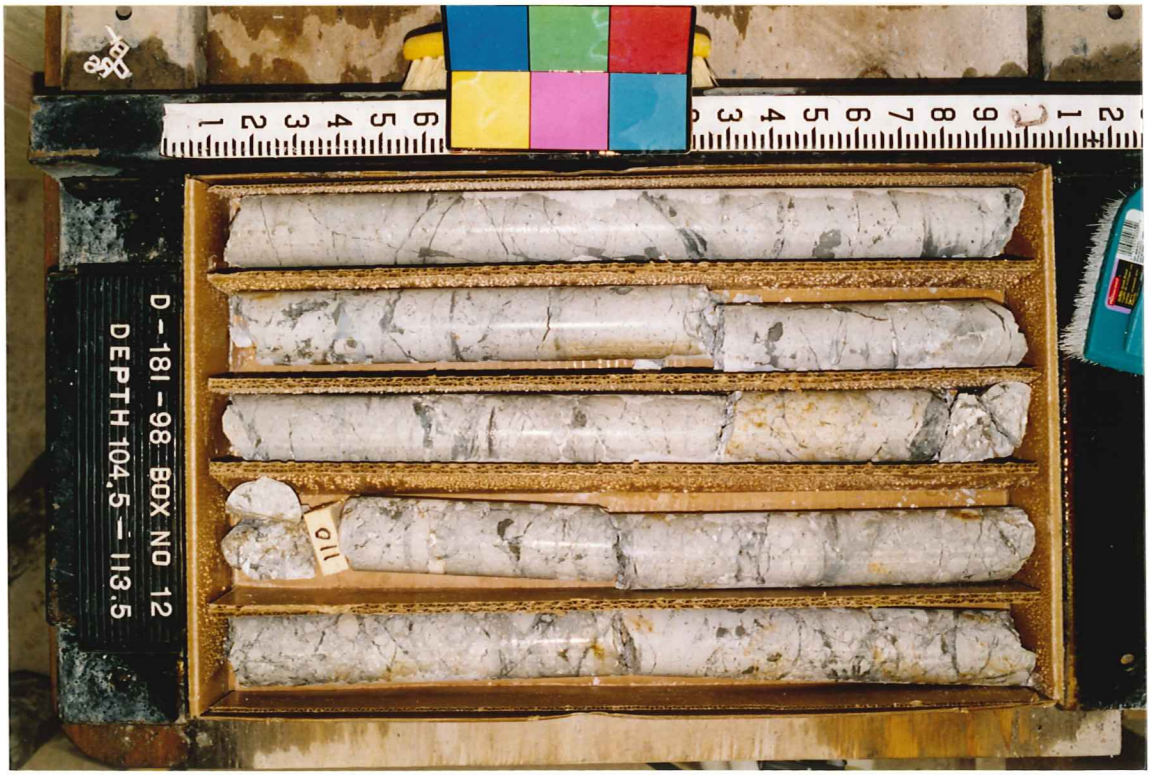
D-181-98 BOX NO 8
DEPTH 66. - 76.

D-181-98 BOX NO 7
DEPTH 56.5 - 66.

D-181-98 BOX NO 9
DEPTH 76. - 86.

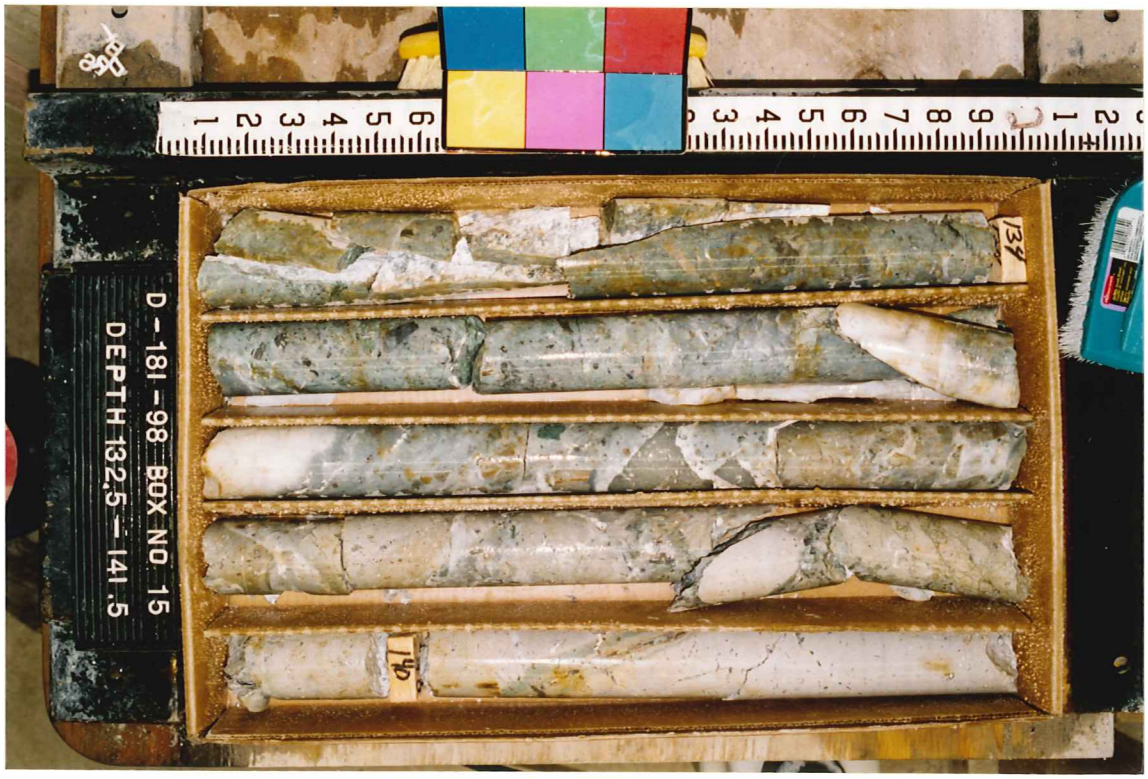
D-181-98 BOX NO 11
DEPTH 95. — 104.5

D-181-98 BOX NO 10
DEPTH 86. — 95.

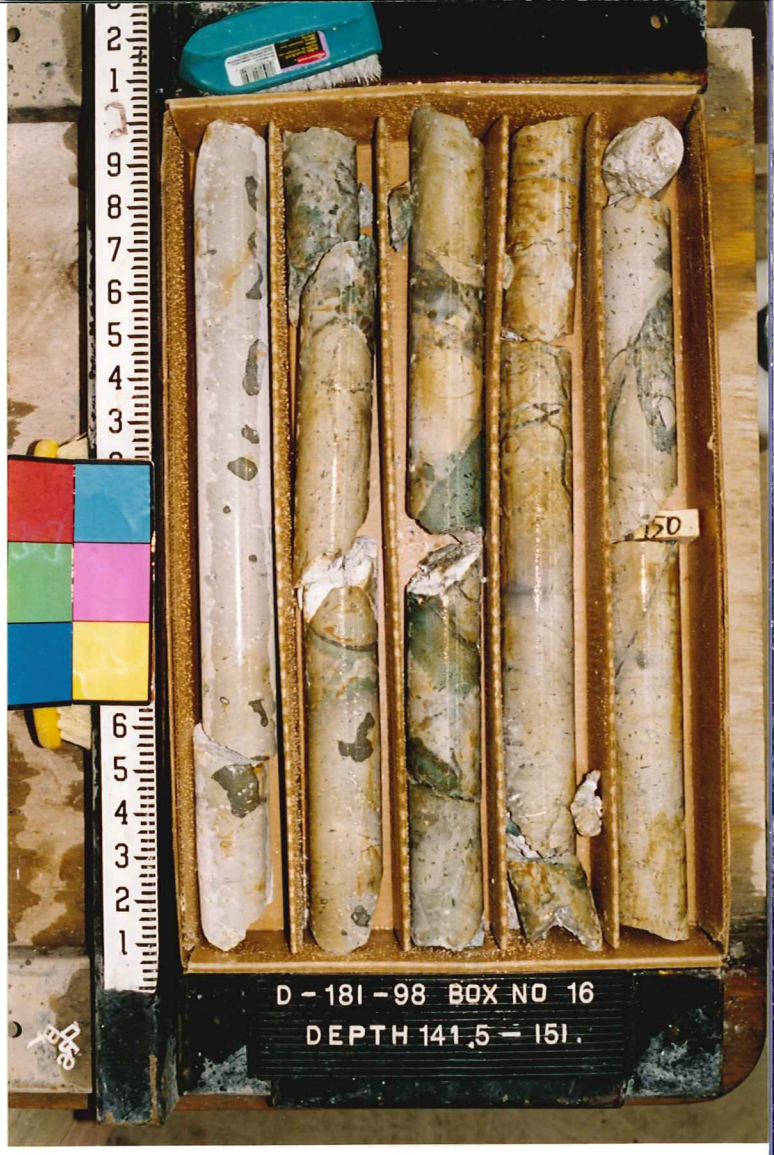

D-181-98 BOX NO 12
DEPTH 104.5 — 113.5

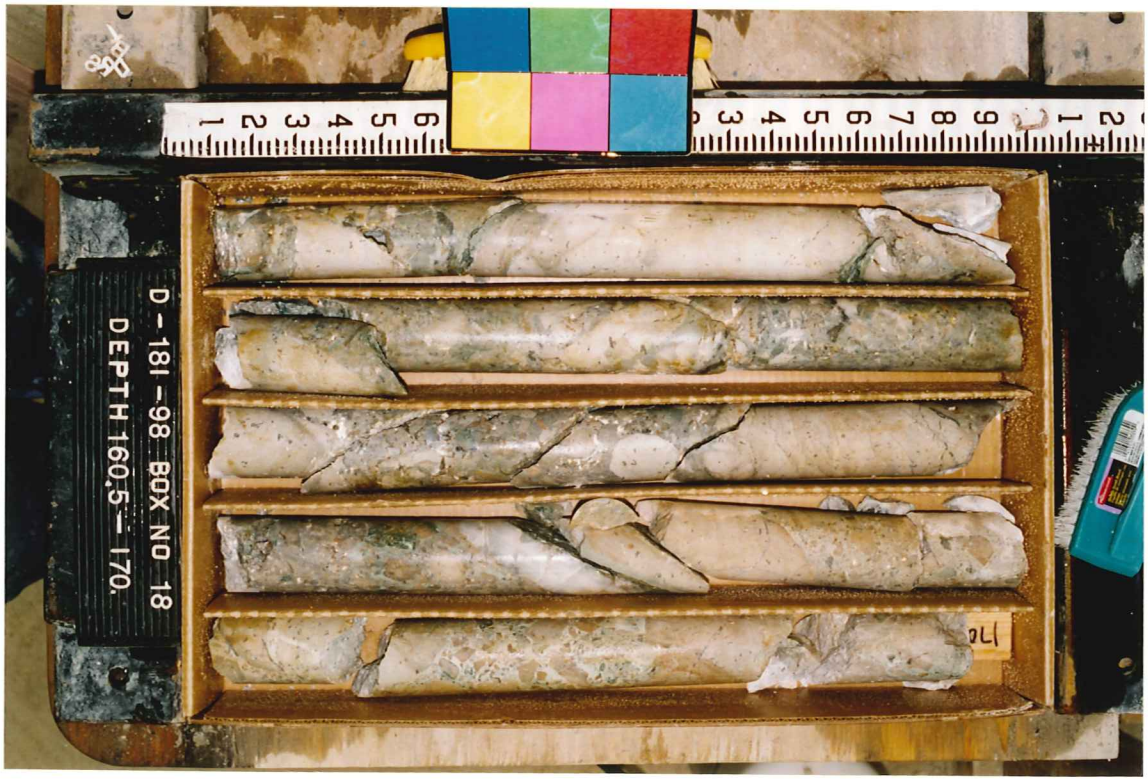
D - 181 - 98 BOX NO 14
DEPTH 123. - 132.5

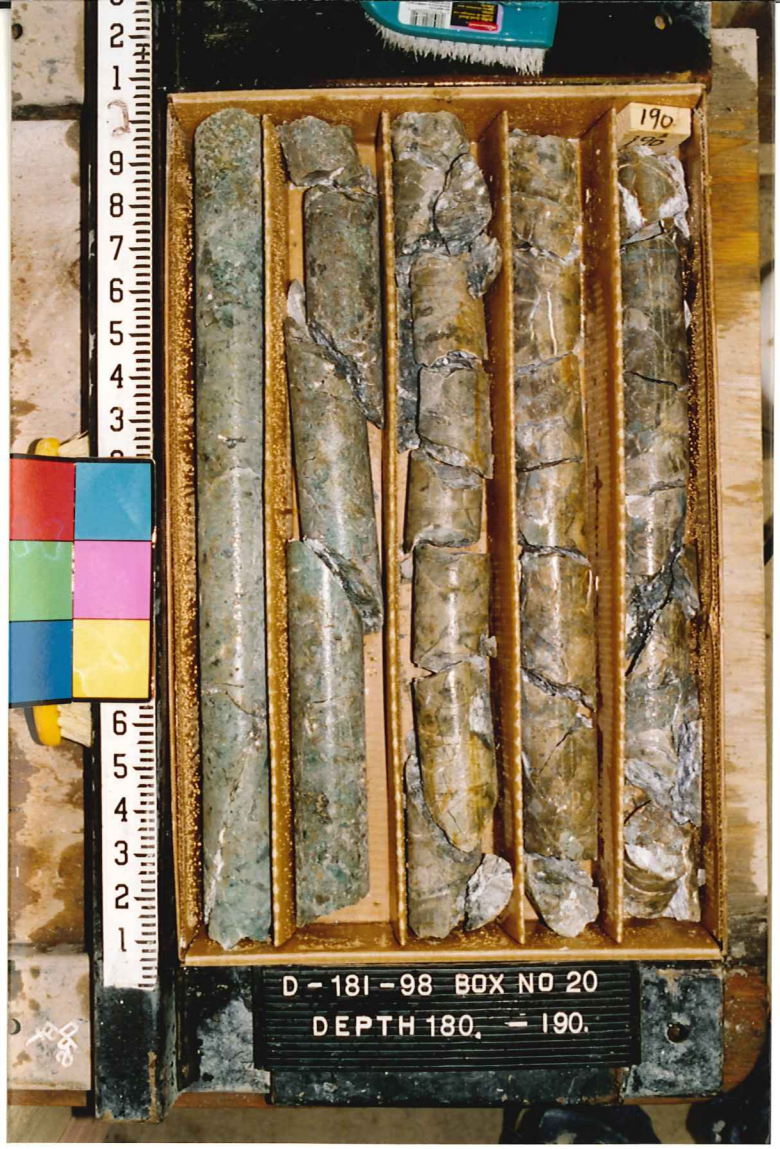
D - 181 - 98 BOX NO 13
DEPTH 113.5 - 123.


D - 181 - 98 BOX NO 15
DEPTH 132.5 - 141.5

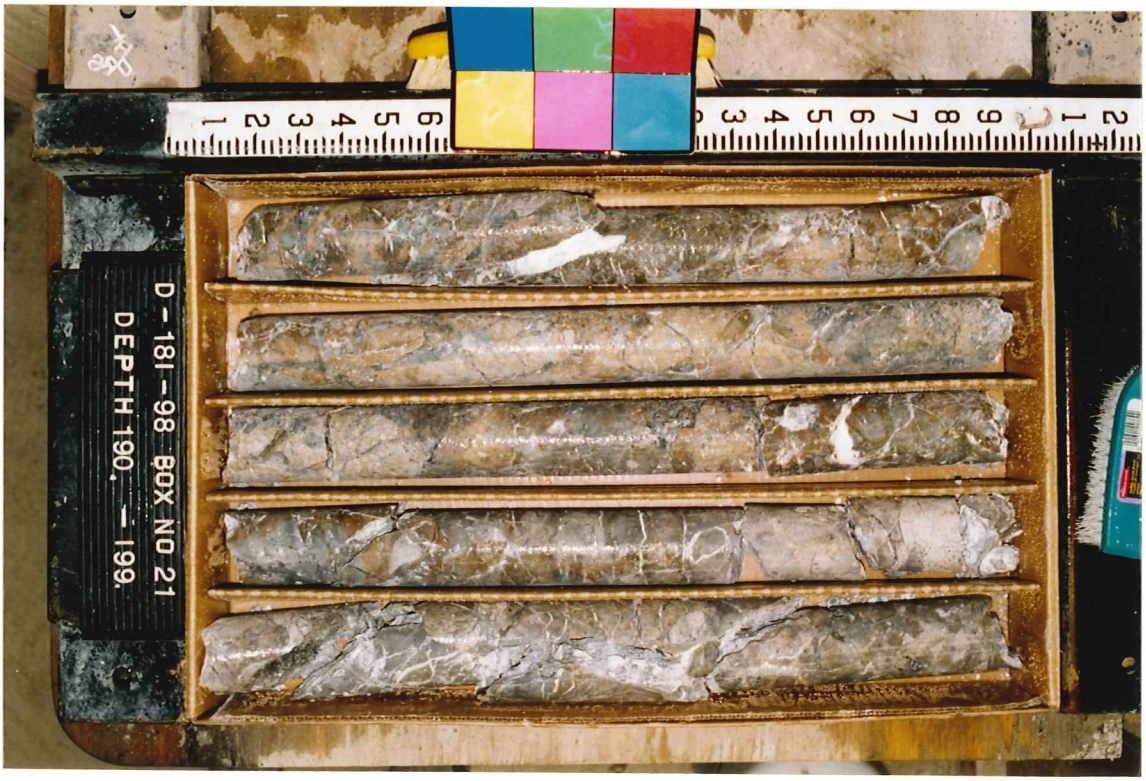
D-181-98 BOX NO 17
DEPTH 151. - 160.5
160


D-181-98 BOX NO 16
DEPTH 141.5 - 151.
150

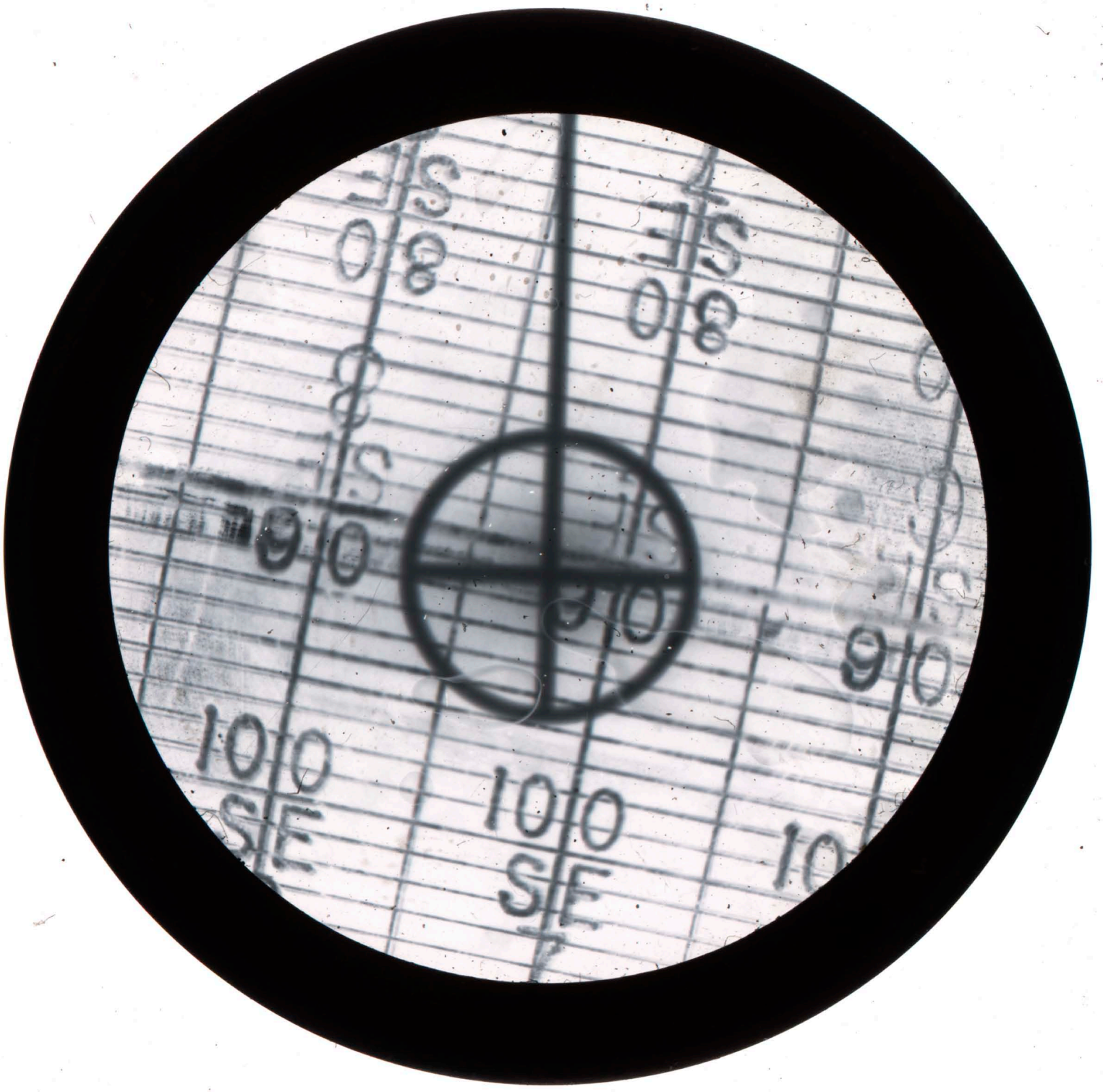

D-181-98 BOX NO 18
DEPTH 160.5 - 170.
170


190
D-181-98 BOX NO 20
DEPTH 180. - 190.

180
D-181-98 BOX NO 19
DEPTH 170. - 180.


D-181-98 BOX NO 21
DEPTH 190. - 199.

200
D-181-98 BOX NO 22
DEPTH 199. -200.
TD


SE
80
90
100
SE

SE
100
060
80
SE