6000 0886

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-132-97
AUTHOR	R. Parish; K. Allen; R. Vance; 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; North Zone; Hecla Mining Co.; Rosebud Mining Co. Ltd
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; [redacted]; total depth 150' receipt; handwritten notes; downhole camera images; photographs 26p. 3 downhole 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-132-97

60000886
4016

6000 0386

- 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-132-97	LOCATION	NORTH ZONE
PAGE 1 OF 3		NORTHING	
DATE	12/2/97	EASTING	
LOGGED BY	R. PARISH	ELEVATION	
SCALE	1" = 10'	AZIMUTH	
TOTAL DEPTH	150'	INCLINATION	

REMARKS

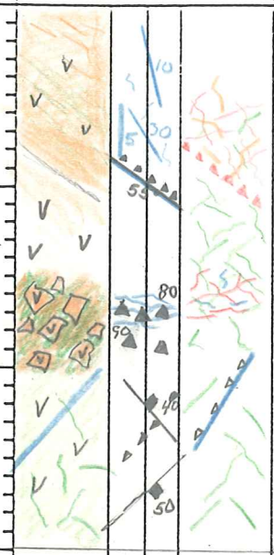
REC	RQD	LITHOLOGY	FT	GRAPHIC LOG (ALT + STR. MINL.)	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
LBT	Leopard skin Tuff?	0-16' Coarse grained Lapilli TUFF. Maroon-gray TO Greenish gray w/ hematite brown/red matrix and alteration. Lapilli to several inches - typically well-rounded, vesicular, and propylitically altered. Leopard skin tuff? Sharp CTC. - 20° TCA	0		1/8" calcite veins w/ faulted walls.	0-50' - Str. to Ext. str. Texture destructive hematite? in botryoidal like veins + clots. Overprinted on propylitic altn. Minor disseminated CaCO3. 1/2" c.grained calcite vn	0	5					
		16'-25 Dark gray, Fine grained, vesicular? Andesitic? flows to several feet thick. Lapilli Tuff interbeds. Primary textures obscured by hematite brown/red subparallel alteration emanating from fractures or sulfide veinlet set. Gradational Lower CTC	10		1/16" chlorite/clay slip		5	10					
		25'-39 Interbedded maroon Lapilli Tuff and Andesitic Flows. Rounded, vesicular Lapilli clasts could be remnant, less altered core stones of Andesite Flows surrounded by "matrix" of altered Flow. Alteration emanating from subparallel sulfide vns.	20		1/4"	1/4" calcite/pyrite vn	10	15					
		39-42 Med gray, F.grained andesitic? Flow -	30			1/16" calcite vnlt.	15	20					
		42-50 Lapilli Tuff? Andesite flows? maroon Textures destroyed by str. hematite alteration in sub-parallel veinlet? sets @ 50 to 80° TCA. ave - 60°	40		1/8" calcite lined slip		20	25					
			50				25	30					
							30	35					
							35	40					
							40	45					
							45	50					

HOLE NUMBER D-132-97 PAGE 2 OF 3

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
LBT	Leopard Skin Tuff?	50-60 Well bedded andesite flows - maroon gray, weakly argillized Lava Beds to 4" w/ Red/brown hematite Lammations. Unit was probably Lommated flows w/ altern Favoring Lammation planes.	50		Bedding 20°TCA	50-119 Str. pervasive hematite altn seeming to eminate from parallel veinlet set, once Sulfidic? giving striped Leopard skin appearance to rk. - Texture appears to X-Cut bedding. Weakly Calcareous.
		60-79 Primary textures completely obscured by hematite alteration. V-rare relict rounded vesicular Lapilli.	60			
			70			
		79-90 Decrease in texture destructive maroon hematite alteration. Vesicular, Lapilli Like texture - possible primary Lapilli tuff, but Probably less altered remnant core stones of Andesite flow.	80		minor slip - 60°, 20° Rake ⅛" calcite cemented Flt BX	90-91 Common calcite veinlets to 1/8" th. ave 60° TCA Increasing Late hematite on fracts.
		90-119 Continued Leopard skin texture. maroon RK. appears to be andesitic flow package. Hematitic alteration seems to have eminated from sulfidic fracture set that often X-cuts bedding.	90		Hematitic Laminations 45°	
			100		Hematitic Laminations 50°	101-103 - Minor green chloritic clay fracture filling.
			110			107 - Minor whispy white $CaCO_3$ veinlets
			120		40° Bedding, Hem. Lamination 60°TCA	

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
50	55					
55	60					
60	65					
65	70					
70	75					
75	80					
80	85					
85	90					
90	95					
95	100					
100	105					
105	110					
110	115					
115	120					

HOLE NUMBER D-132-97 PAGE 3 OF 3

SEC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
LBT		119 – 129.5 F.grained andesite flows w/ Leopard skin texture. Bleaching begins @ 119 and gradually removes all traces of hematite - Leaving weak propylitic altn. RK is increasingly sheared and incompetent. 129.5 – 135 Sharp CTC. Lt. greenish gray, F.grained Andesitic flow. Moderately hard. Fractured, w/ stkwork veins of green-chloritic clay. Completely lacking hematite, but faint vesicular? texture looks like leopard skin RK above. 135 - 140 - Tectonic clast supported Bx. strongly argillized, angular clasts in green chloritic clay matrix. 136-137 - sheared Flt. zone 140 - 150 - pale green gray Fine grained, andesitic flow. Vesicular? from 140-142.5. moderately hard	120 130 140 150	 EOH	126-129.5 - zone of mod str. shearing from 0 to 30° TCA. Ave 10° - Rakes 300 - Oblique slip 2" Tectonic Bx. Milled clasts of gray sulfidic Volcanic, 136-137 strongly sheared Fault zone - 20-90° TCA. chloritic clay gouge. 142.8 - 4" Calcite Vn. Sharp Lower ctc. Bx'd upper ctc. 145-150 - Numerous joints and chloritic slips @ ~ 40° TCA	119 – 129.5 - increase in Bleach/argillization, str. incr. in white and green clay fracture filling below 123.5'. moderate pyrite Stockwork veinlets 124.3 to 129.5. 2" sulfidic Bx @ 129.5'. sharp ctc. 135 - 138 - Strongly argillized w/ mod py veinlets and chloritic shears. 138 - 150 - Weak prop. alt.	120	124.3					
							124.3	129.5					
							129.5	135					
							135	138					
							138	142.8					
							142.8	147					
							147	150					

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-132-97 DATE: 12/2/97 LOGGED BY: R. PARISH 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	5	60.0	66.0	38.0										
5	10	96.0	96.0	80.0										
10	15	84.0	84.0	78.0										
15	20	96.0	96.0	78.0										
20	25	106.0	106.0	88.5										
25	30	100.0	100.0	92.0										
30	35	104.0	104.0	100.0										
35	40	97.0	97.0	72.0										
40	45	96.0	96.0	82.0										
45	50	102.0	102.0	88.0										
50	55	100.0	100.0	70.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-132-97 DATE: 12/2/97 LOGGED BY: R. PARISH 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)
55	60	100.0	100.0	86.0										
60	65	100.0	100.0	70.0										
65	70	100.0	100.0	90.0										
70	75	104.0	104.0	96.0										
75	80	100.0	100.0	94.0										
80	85	86.0	86.0	86.0										
85	90	98.0	98.0	54.0										
90	95	100.0	100.0	60.0										
95	100	100.0	100.0	86.0										
100	105	100.0	100.0	64.0										
105	110	98.0	98.0	72.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-132-97 DATE: 12/2/97 LOGGED BY: R PARISH 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)
110	115	98.0	98.0	80.0										
115	120	100.0	100.0	84.0										
120	125	92.0	102.0	80.0										
125	130	48.0	92.0	12.0										
130	135	82.0	96.0	24.0										
135	140	72.0	94.0	22.0										
140	145	84.0	96.0	40.0										
145	150	96.0	96.0	42.0										

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047572

PO BOX 11530
RENO NV.USA
Ph.(702) 356-0898, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN
:
:
:

N51

CLIENT REFERENCE NO: D-132-97 RECEIVED : 8 DEC 1997

No. SAMPLES : 31 REPORTED : 17 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.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047572

CLIENT : BECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 17 DEC 1997

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
D-132-97 000-005	<0.001		<0.02
D-132-97 005-010	<0.001		<0.02
D-132-97 010-015	<0.001		<0.02
D-132-97 015-020	<0.001		<0.02
D-132-97 020-025	<0.001		<0.02
D-132-97 025-030	<0.001		<0.02
D-132-97 030-035	<0.001		<0.02
D-132-97 035-040	<0.001		<0.02
D-132-97 040-045	<0.001		<0.02
D-132-97 045-050	<0.001		<0.02
D-132-97 050-055	<0.001	<0.001	<0.02
D-132-97 055-060	<0.001		<0.02
D-132-97 060-065	<0.001		<0.02
D-132-97 065-070	<0.001		<0.02
D-132-97 070-075	<0.001		<0.02
D-132-97 075-080	<0.001		<0.02
D-132-97 080-085	<0.001		<0.02
D-132-97 085-090	<0.001		<0.02
D-132-97 090-095	<0.001		<0.02
D-132-97 095-100	<0.001		<0.02
D-132-97 100-105	<0.001	<0.001	<0.02
D-132-97 105-110	<0.001		<0.02
D-132-97 110-115	<0.001		<0.02
D-132-97 115-120	<0.001		<0.02
D-132-97 120.0-124.3	<0.001		<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047572

CLIENT : BECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 17 DEC 1997

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
D-132-97 124.3-129.3	<0.001		<0.02
D-132-97 129.3 135.0	0.005		<0.02
D-132-97 135-138	0.002		<0.02
D-132-97 138.0-142.8	<0.001		<0.02
D-132-97 142.8-147.0	<0.001		<0.02
D-132-97 147-150	<0.001		<0.02

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. LLT

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: 12/5/97 Number of Samples: 30

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

D-132-97 SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED
0-5	80-85	CORE	AU-Ag FOLLOWING ROSEBUD
5-10	85-90		MINE PROTOCOL
10-15	90-95		
15-20	95-100		
20-25	100-105		
25-30	105-110		
30-35	110-115		
35-40	115-120		
45-50	120-124.3		
50-55	124.3-129.3		
55-60	129.3-135		
60-65	135-138		
65-70	138-142.8		
70-75	142.8-147		
75-80	147-150		

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
RANDY VANCE

Comments:

CLIENT FILE COPY

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047572

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-132-97 RECEIVED : 8 DEC 1997

No. SAMPLES : 31 REPORTED : 16 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(BZ)	FA30	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047572

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 16 DEC 1997

SAMPLES	Au(OZ)	Au(BZ)	Ag(OZ)
D-132-97 000-005	<0.001		
D-132-97 005-010	<0.001		
D-132-97 010-015	<0.001		
D-132-97 015-020	<0.001		
D-132-97 020-025	<0.001		
D-132-97 025-030	<0.001		
D-132-97 030-035	<0.001		
D-132-97 035-040	<0.001		
D-132-97 040-045	<0.001		
D-132-97 045-050	<0.001		
D-132-97 050-055	<0.001	<0.001	
D-132-97 055-060	<0.001		
D-132-97 060-065	<0.001		
D-132-97 065-070	<0.001		
D-132-97 070-075	<0.001		
D-132-97 075-080	<0.001		
D-132-97 080-085	<0.001		
D-132-97 085-090	<0.001		
D-132-97 090-095	<0.001		
D-132-97 095-100	<0.001		
D-132-97 100-105	<0.001	<0.001	
D-132-97 105-110	<0.001		
D-132-97 110-115	<0.001		
D-132-97 115-120	<0.001		
D-132-97 120.0-124.3	<0.001		

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP047572

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 16 DEC 1997

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
D-132-97 124.3-129.3	<0.001		
D-132-97 129.3-135.0	0.005		
D-132-97 135-138	0.002		
D-132-97 138.0-142.8	<0.001		
D-132-97 142.8-147.0	<0.001		
D-132-97 147-150	<0.001		

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 0047572-IN
INVOICE DATE: 12/17/97

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-132-97	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
31	SAMPLES RECEIVED	.00	.00
31	JAW CRUSHING CHARGE	1.30	40.30
31	COARSE MILLING CHARGE	4.50	139.50
31	SPLITTING CHARGE	2.40	74.40
31	RING MILLING CHARGE	2.00	62.00
31	Au (1 A.T. FIRE ASSAY)	8.00	248.00
31	HYDROCHLORIC/NITRIC DIGESTION	2.00	62.00
31	Ag ANALYSES	1.00	31.00

~~0651-065110~~
06-5110-720

NET INVOICE:	657.20
LESS DISCOUNT:	131.44
FREIGHT:	.00
INVOICE TOTAL:	525.76

xAMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP047572

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-132-97 RECEIVED : 8 DEC 1997

No. SAMPLES : 31 REPORTED : 17 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.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP047572

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 17 DEC 1997

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
D-132-97 000-005	<0.001		<0.02
D-132-97 005-010	<0.001		<0.02
D-132-97 010-015	<0.001		<0.02
D-132-97 015-020	<0.001		<0.02
D-132-97 020-025	<0.001		<0.02
D-132-97 025-030	<0.001		<0.02
D-132-97 030-035	<0.001		<0.02
D-132-97 035-040	<0.001		<0.02
D-132-97 040-045	<0.001		<0.02
D-132-97 045-050	<0.001		<0.02
D-132-97 050-055	<0.001	<0.001	<0.02
D-132-97 055-060	<0.001		<0.02
D-132-97 060-065	<0.001		<0.02
D-132-97 065-070	<0.001		<0.02
D-132-97 070-075	<0.001		<0.02
D-132-97 075-080	<0.001		<0.02
D-132-97 080-085	<0.001		<0.02
D-132-97 085-090	<0.001		<0.02
D-132-97 090-095	<0.001		<0.02
D-132-97 095-100	<0.001		<0.02
D-132-97 100-105	<0.001	<0.001	<0.02
D-132-97 105-110	<0.001		<0.02
D-132-97 110-115	<0.001		<0.02
D-132-97 115-120	<0.001		<0.02
D-132-97 120.0-124.3	<0.001		<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP047572

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 17 DEC 1997

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
D-132-97 124.3-129.3	<0.001		<0.02
D-132-97 129.3-135.0	0.005		<0.02
D-132-97 135-138	0.002		<0.02
D-132-97 138.0-142.8	<0.001		<0.02
D-132-97 142.8-147.0	<0.001		<0.02
D-132-97 147-150	<0.001		<0.02

xAMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP047572

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-132-97 RECEIVED : 8 DEC 1997

No. SAMPLES : 31 REPORTED : 17 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.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP047572

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 17 DEC 1997

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
D-132-97 000-005	<0.001		<0.02
D-132-97 005-010	<0.001		<0.02
D-132-97 010-015	<0.001		<0.02
D-132-97 015-020	<0.001		<0.02
D-132-97 020-025	<0.001		<0.02
D-132-97 025-030	<0.001		<0.02
D-132-97 030-035	<0.001		<0.02
D-132-97 035-040	<0.001		<0.02
D-132-97 040-045	<0.001		<0.02
D-132-97 045-050	<0.001		<0.02
D-132-97 050-055	<0.001	<0.001	<0.02
D-132-97 055-060	<0.001		<0.02
D-132-97 060-065	<0.001		<0.02
D-132-97 065-070	<0.001		<0.02
D-132-97 070-075	<0.001		<0.02
D-132-97 075-080	<0.001		<0.02
D-132-97 080-085	<0.001		<0.02
D-132-97 085-090	<0.001		<0.02
D-132-97 090-095	<0.001		<0.02
D-132-97 095-100	<0.001		<0.02
D-132-97 100-105	<0.001	<0.001	<0.02
D-132-97 105-110	<0.001		<0.02
D-132-97 110-115	<0.001		<0.02
D-132-97 115-120	<0.001		<0.02
D-132-97 120.0-124.3	<0.001		<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP047572

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-132-97

REPORTED : 17 DEC 1997

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
D-132-97 124.3-129.3	<0.001		<0.02
D-132-97 129.3-135.0	0.005		<0.02
D-132-97 135-138	0.002		<0.02
D-132-97 138.0-142.8	<0.001		<0.02
D-132-97 142.8-147.0	<0.001		<0.02
D-132-97 147-150	<0.001		<0.02

Survey

[MAGNETIC DECLINATION = 15.7°]

Hole #	FILM FOOTAGE ~~FROM — TO~~	BEARING	DIP	TRUE BEARING	DIP
D-132-97	10'	S51°E	+14°	N35.3°W	+14°
	70'	S52.5E	+14.5°	N36.8°W	+14.5°
	140'	S53°E	+14°	N37.3°W	+14°

15
20
132-97 BOX N02
DEPTH 11-21.5

5
10
132-97 BOX N01
DEPTH 0-11

25
30
132-97 BOX N03
DEPTH 21.5-30

40
45
132-97 BOX N05
DEPTH 39-49

35
132-97 BOX N04
DEPTH 30-39

50
55
132-97 BOX N06
DEPTH 49-58

70
75
132-97 BOX N08
DEPTH 67 – 75.5

60
65
132-97 BOX N07
DEPTH 58 – 67

Kodak
Gold
400
132-97 BOX N09
DEPTH 75.5 – 85.5
80
85

100
95
132-97 BOX N011
DEPTH 94.5-104

96
132-97 BOX N010
DEPTH 85.5-94.5

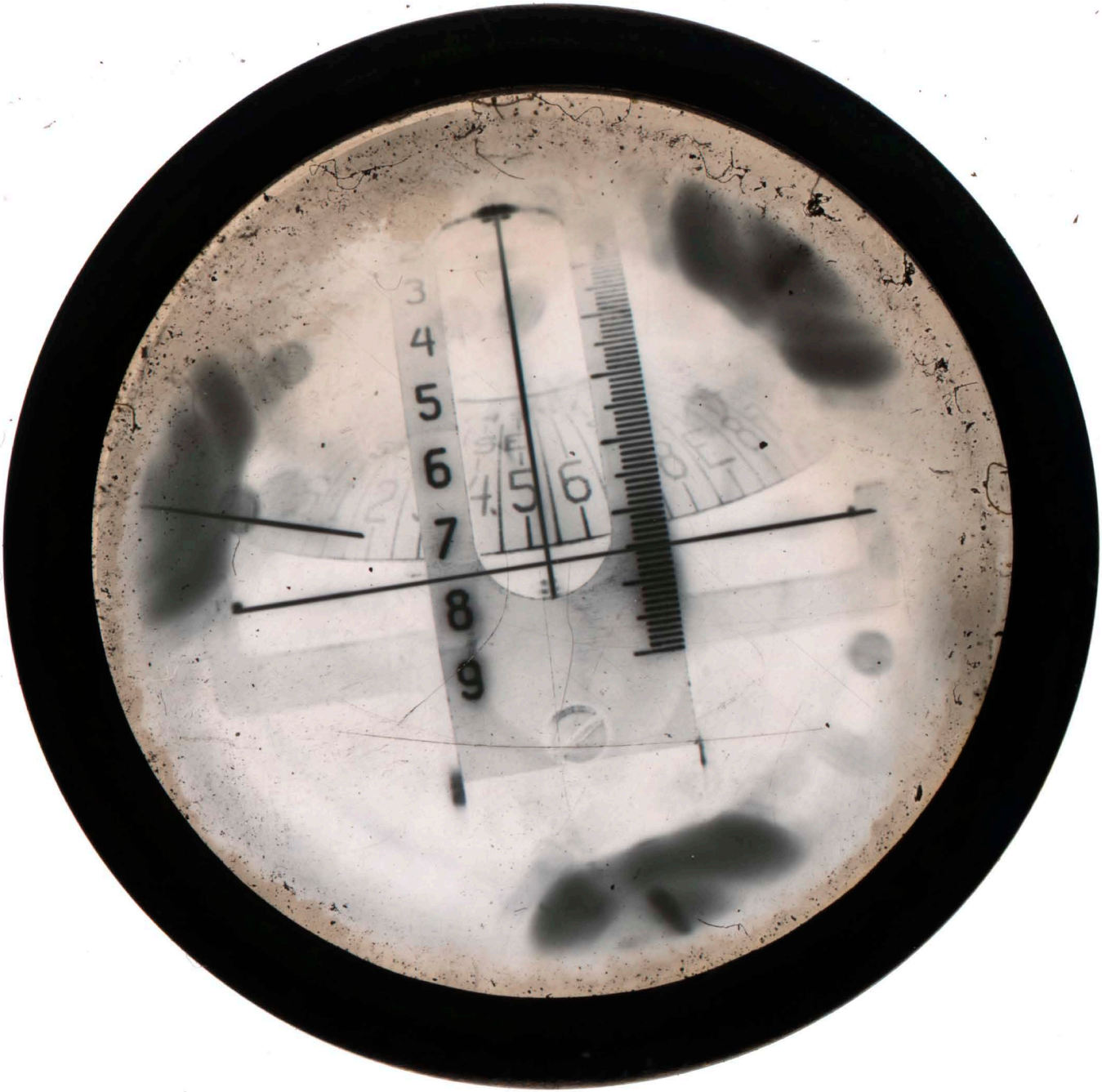
Kodak Gold 400
105
110
132-97 BOX N012
DEPTH 104-113.5

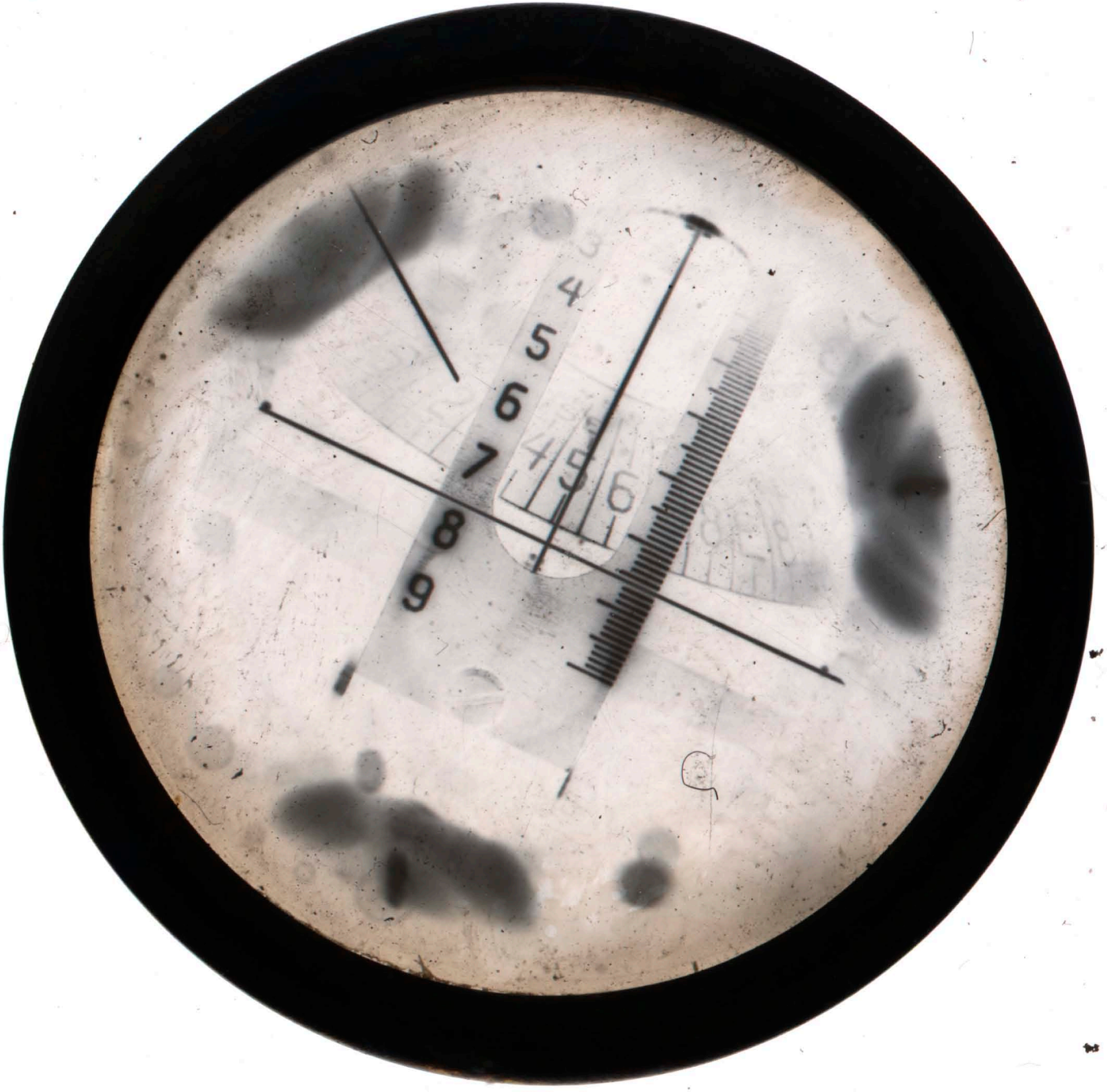
132-97 BOX N014
DEPTH 123 – 132.5

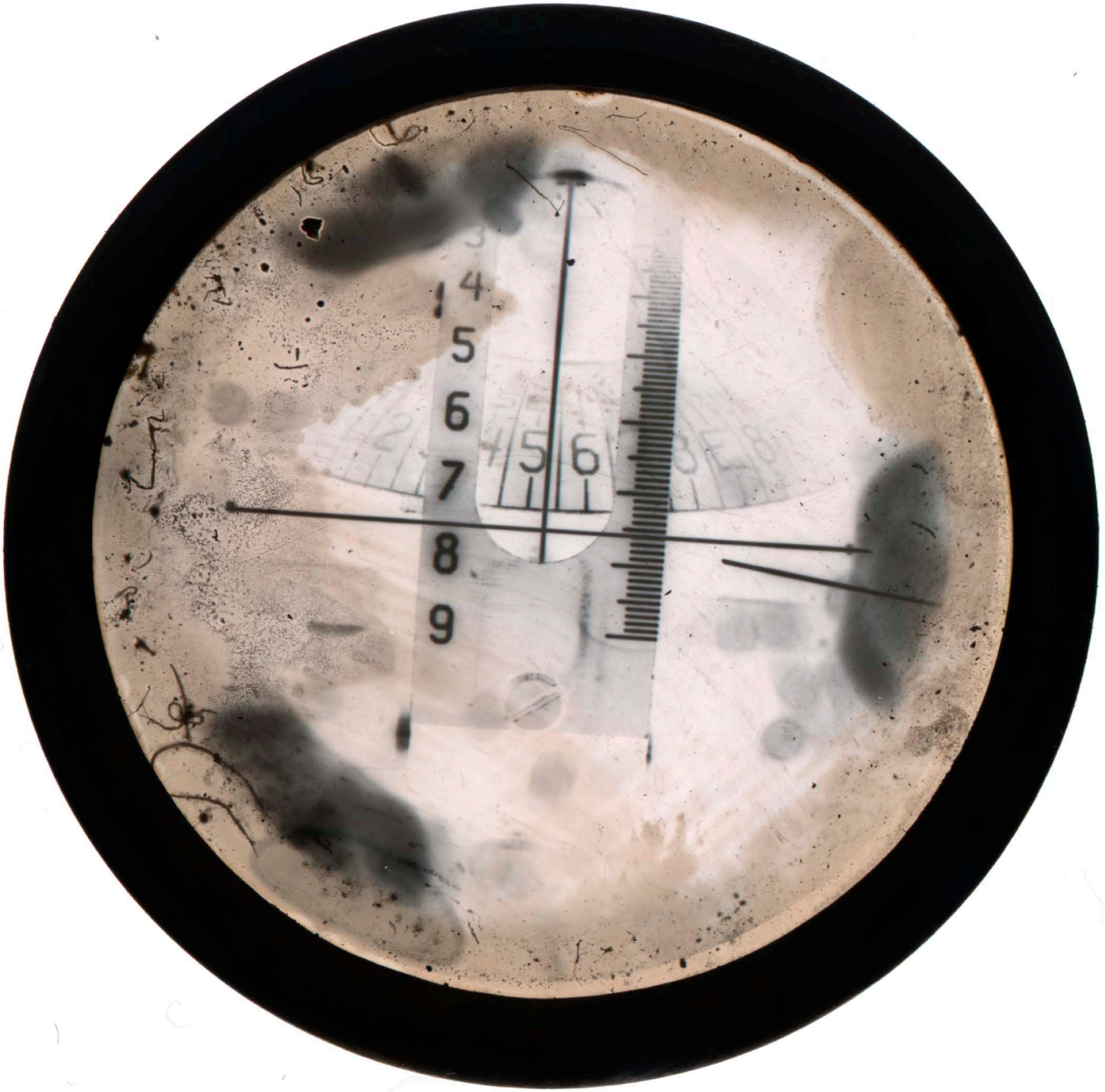
132-97 BOX N013
DEPTH 113.5 – 123

132-97 BOX N015
DEPTH 132.5–141.5

132-97
BOX N016
DEPTH 141.5—150
145
147
148
150


3
4
5
6
7
8
9
4
5
6


4
5
6
7
8
9
4
5
6


4
5
6
7
8
9
4 5 6