60001237

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-336-99
AUTHOR	B. Morris; K. Allen; L. Mackedon
DATE OF DOC(S)	1999
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 240' receipt; handwritten notes; downhole camera images 26p. 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: NVB
Initials Date

Revised: 1/22/08

D-336-99

60001237 4010

60001237

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 336-99	LOCATION	Stope 25	REMARKS	
PAGE 1 OF 4		NORTHING		Drill station is 13 feet	
DATE	2-9-99	EASTING		higher in elevation than	
LOGGED BY	Brian Morris	ELEVATION	4448	originally thought.	
SCALE	1"=10'	AZIMUTH	S 54 E		
TOTAL DEPTH	240.0	INCLINATION	+3°		

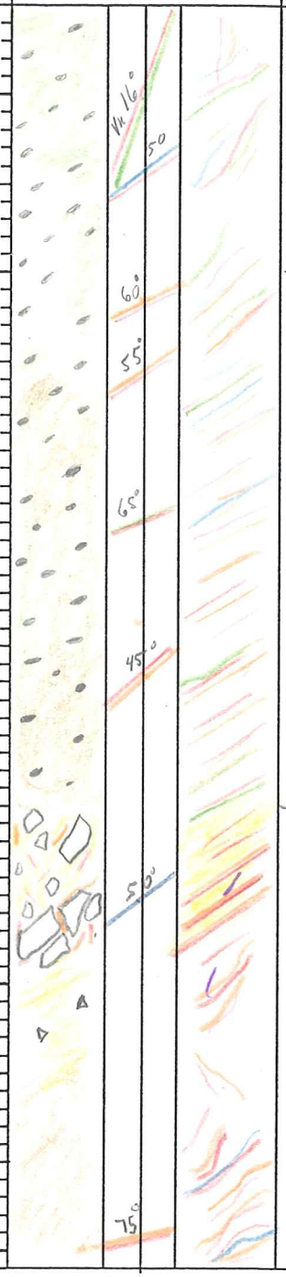
LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		0 – 41.3 Massive - Slightly Planar Laminated Light gr - Lt tope br fg massive - Faint lamina.	10 20 30 40 50	Vn 50° Vn 35° Flt 32° 55° 60° 70°	28.8 – 33.0 Flt Grading from Crackle - mosaic - rubble Bxa, Lt gry SiO_2 healed w/ .1" - 3" dia angular - subangular SPLAT & LST Clasts, Mtx contains W.C. + Marc Filled Vuggs.	0 – 15' Wk - Mod blch & wk argil, wk 1-3cm wide $CaCO_3$ + sulf Vn, wk - gr clay Vnlets, wk - mod conc. of Sulf patches. 15 – 30 Mod blch & argil w/ Chlor alt, mod gr clay Vn ± $CaCO_3$. 35 – 37.8 str W.C. + Bladed Marc Vug & Fx filling.
		32.4 – 41.3 LST "Wannabe" Flt Cont. Lt gr - Lt br fg w/ fine speckled text.				
		41.3 – 240' LST - Flt Contact Lt gr - Lt br fg w/ 1cm dia wh. speckled text.			45 – 54 Wk - Mod silic, Chlor + sulf Vnlets.	

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ac
0	10.0					
10.0	20.0					
20.0	30.0					
30.0	40.0					
40.0	50.0					

HOLE NUMBER D-336-99 PAGE 2 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
		LST	60, 70, 80, 90, 100, 110, 120	Vn 65°; Bed 50°; Marc 40°; 40°	100-101' Flt Mosaic bxa w/ str leaching of SiO_2 Mtx, minor bladed Marc in open spaces.	55-85' Wk-locally mod, $CaCO_3$ + Marc Vn, Wk-Mod Sulf stringer ± Chlor 95-92 1-3cm wide Vuggie Marc filled Vns & Vnlets, Mod Marc → Py. 92-120 Mod blch, mod Chlor alt along sulf Vnlets & Fx, ± $CaCO_3$. 105-115 Mod W.c. + Marc, Minor Marc → Py ± gr clay.	50 60 70 80 90 100 110	60 70 80 90 100 110 120					

HOLE NUMBER _____ PAGE 3 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		LST Gr-br fg str-faint Lt gr-wh speckles	130 140 150 160 170 180 190		135-165 Str parallel-sub parallel Joints & Fx. 165-177' Zone of SiO_2 healed Crackle-rubble bxa.	120-152' Mod Sulf ± gr clay ± W.C. stk wlk + Vn, wlk-Mod Chlor alt from sulf Vn .1-1" wide, locally mod $CaCO_3$ + Marc Vug ± SiO_2 healed bxas + Vning. 135-165 Str gr clay + W.C. ± Marc Joint & Fx Fillings. 165-177' SiO_2 mtx strongly leached w/ marc in SiO_2 mtx & Vug fillings, W.C. Vug fillings, ± barite 183-190 Increase in $CaCO_3$ + Marc Vug

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	
120	130					
130	140					
140	150					
150	160					
160	170					
170	180					
180	190					

HOLE NUMBER D-336-99 PAGE 4 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
		LST 190-240'				190-200' Str W.C.± SiO2 ± barite Vuggie Vn. Bladed Marc. Mod Marc → Py, Wk-Mod Argil, Minor Sulf soaked patches.	190	200				
			200		200'-208' Crackle-Rubble Bxa, healed by Wh-clay		200	210				
			210				210	220				
			220		224-229' Flt Lt gr Clay healed Rubble Bxa.	224-229 Mod leaching of Mtx. Yellowish tan Clay Vug fillings, Marc.	220	230				
			230		234-240 W.C.± SiO2 healed Mosaic bxa.	234-240' Wk hair line Sulf vnlets, Wk Bladed Marc.	230	240				
		T.D. 240'	240									

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-336-99 DATE: 2-9-99 LOGGED BY: Brian Morris PAGE 1 OF 5

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	100.0	96.0	46.0										
5.0	10.0	100.0	100.0	100.0										
10.0	15.0	100.0	100.0	100.0										
15.0	20.0	100.0	98.0	100.0										
20.0	25.0	100.0	92.0	91.3										
25.0	30.0	100.0	98.0	99.0										
30.0	35.0	100.0	90.0	93.3										
35.0	40.0	100.0	100.0	92.0										
40.0	45.0	100.0	96.0	72.9										
45.0	50.0	100.0	96.0	92.7										
50.0	55.0	100.0	94.0	100.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-336-99 DATE: 2-9-99 LOGGED BY: BWM PAGE 2 OF 5

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)
55.0	60.0	100.0	98.0	95.9										
60.0	65.0	100.0	94.0	95.7										
65.0	70.0	100.0	92.0	63.6										
70.0	75.0	100.0	98.0	87.8										
75.0	80.0	100.0	84.0	72.7										
80.0	85.0	100.0	96.0	77.1										
85.0	90.0	100.0	96.0	66.7										
90.0	95.0	100.0	88.0	65.9										
95.0	100.0	100.0	96.0	37.8										
100.0	105.0	100.0	100.0	82.0										
105.0	110.0	100.0	98.0	69.4										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-336-99 DATE: 2-9-99 LOGGED BY: BWM PAGE 3 OF 5

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)
110.0	115.0	100.0	96.0	39.6										
115.0	120.0	100.0	96.0	45.8										
120.0	125.0	100.0	90.0	57.8										
125.0	130.0	100.0	98.0	53.1										
130.0	135.0	100.0	98.0	26.5										
135.0	140.0	100.0	88.0	15.9										
140.0	145.0	100.0	96.0	16.7										
145.0	150.0	100.0	92.0	37.0										
150.0	155.0	100.0	90.0	26.7										
155.0	160.0	100.0	90.0	20.0										
160.0	165.0	100.0	94.0	25.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

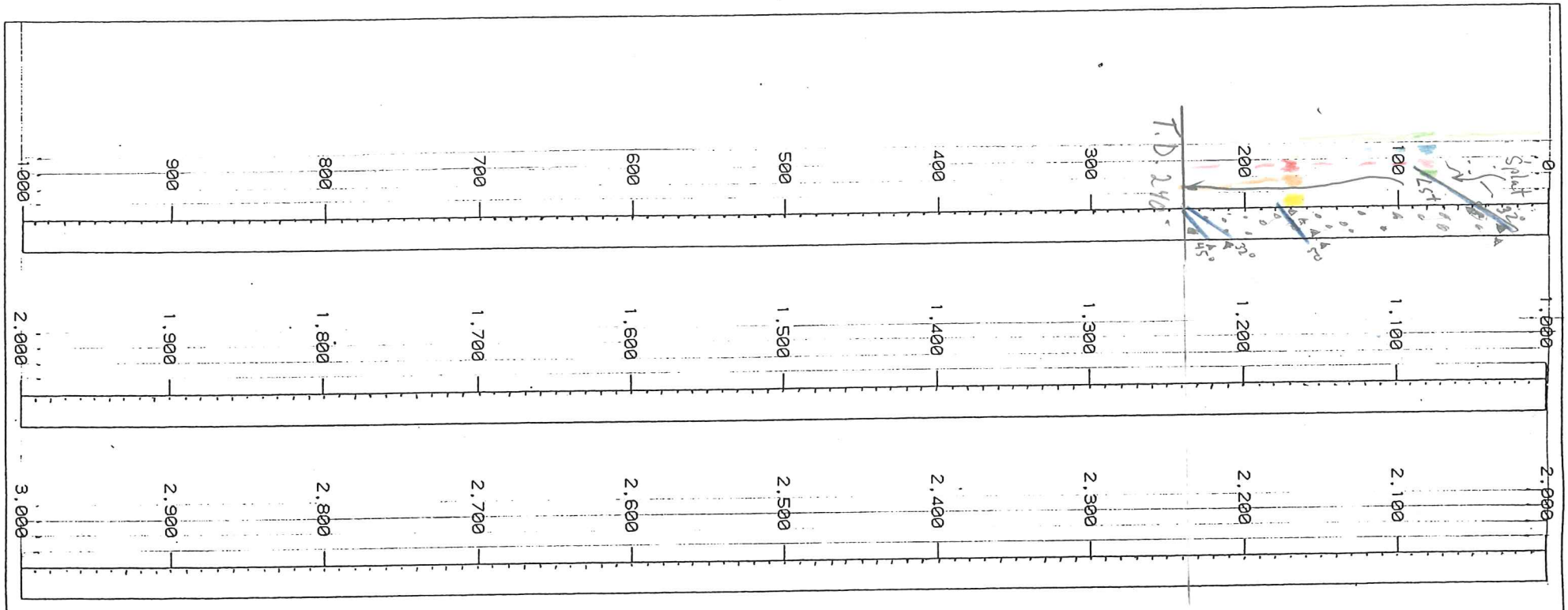
HOLE # D-336-99 DATE: 2-9-99 LOGGED BY: BWM PAGE 4 OF 5

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)
165.0	170.0	100.0	96.0	56.3										
170.0	175.0	100.0	98.0	51.0										
175.0	180.0	100.0	88.0	47.7										
180.0	185.0	100.0	100.0	62.0										
185.0	190.0	100.0	100.0	34.0										
190.0	195.0	100.0	96.0	10.4										
195.0	200.0	100.0	96.0	35.4										
200.0	205.0	100.0	98.0	65.3										
205.0	210.0	100.0	92.0	84.8										
210.0	215.0	100.0	96.0	18.8										
215.0	220.0	100.0	100.0	38.0										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-336-99 DATE: 2-9-99 LOGGED BY: BWM PAGE 5 OF 5

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)
220.0	225.0	100.0	100.0	68.0										
225.0	230.0	100.0	94.0	65.2										
230.0	235.0	100.0	96.0	52.1										
235.0	240.0	100.0	96.0	20.8										



LITHOLOGY

- PLAT/FLOW
- MASSIVE AT/FLOW
- LST-
- PMBX -
- TOS/BUD Epiclastics
- BMB - Rhyolitic Porphyry
- RHYOLITE - DOZER
- ALS - PHYLLITES

TEXTURES

- LITHIC FRAGMENTS
- CRYSTALS
- LAPILLI
- AMYGDULES
- SPHERULITE
- SHARDS

STRUCTURES

- BRECCIA
- FAULT
- CLAY OR GOUGE
- FRACTURE ZONE
- VEINS Qtz
- VEINLETS
- VEINS CALC

CONTACTS

- LOST, GRADATIONAL OR INFERRED
- 80 SHARP (WITH ANGLE TO CORE)
- WAVY
- ROUGH OR JAGGED
- PYRITIZATION
- CHLORITIZATION
- ARGILLIZATION
- SILICIFICATION
- GRAPHIC LOG

LOCATION ON GRID: Stope 25	FINAL COLLAR COORDINATES	START 2-9-98	FINISH 2-10-98	LOGGED BY Brian Morris
LAB	NORTH	HOLE TYPE Underground Core		SURVEYED TO 240'
JOB #	EAST	BEARING S 54E	ANGLE +3°	T. D. 240'
DRILLING COMPANY North West	ELEV / DRILLER			

The Rosebud Mining Company LLC

PAGE 1 OF 1

HOLE #D-336-99

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052555

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(775) 356-0606, Fax.(775) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

:

:

:

CLIENT REFERENCE No: D-336-99 0-240 RECEIVED : 18 FEB 1999

No. SAMPLES : 25 REPORTED : 18 FEB 1999

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 : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052555

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD PRODUCTION
REFERENCE : D-336-99 0-240

REPORTED : 18 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-336-99 000-010	0.004			0.06
D-336-99 010-020	0.004			0.04
D-336-99 020-030	0.004			0.04
D-336-99 030-040	0.019			0.08
D-336-99 040-050	0.007			0.06
D-336-99 050-060	0.009			0.06
D-336-99 060-070	0.021			0.07
D-336-99 070-080	0.019			0.07
D-336-99 080-090	0.016			0.12
D-336-99 090-100	0.023			0.50
D-336-99 100-110	0.099		0.067	0.15
D-336-99 110-120	0.017			0.08
D-336-99 120-130	0.007			0.08
D-336-99 130-140	0.023			0.09
D-336-99 140-150	0.013			0.08
D-336-99 150-160	0.011			0.06
D-336-99 160-170	0.013			0.08
D-336-99 170-180	0.013			0.06
D-336-99 180-190	0.009			0.07
D-336-99 190-200	0.039			0.08
D-336-99 200-210	0.053		0.079	0.09
D-336-99 210-220	0.008			0.07
D-336-99 220-230	0.009			0.06
D-336-99 230-240	0.013			0.06
51479	0.553			4.45

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP052555

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Ph.(775) 356-0606, Fax.(775) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN
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:

CLIENT REFERENCE No: D-336-99 0-240 RECEIVED : 18 FEB 1999

No. SAMPLES : 25 REPORTED : 18 FEB 1999

MAIN SAMPLE TYPE : DRILL CORE

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

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052555

American Assay Laboratories

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PROJECT : ROSEBUD PRODUCTION
REFERENCE : D-336-99 0-240

REPORTED : 18 FEB 1999

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D-336-99 000-010	0.004			0.06
D-336-99 010-020	0.004			0.04
D-336-99 020-030	0.004			0.04
D-336-99 030-040	0.019			0.08
D-336-99 040-050	0.007			0.06
D-336-99 050-060	0.009			0.06
D-336-99 060-070	0.021			0.07
D-336-99 070-080	0.019			0.07
D-336-99 080-090	0.016			0.12
D-336-99 090-100	0.023			0.50
D-336-99 100-110	0.099		0.067	0.15
D-336-99 110-120	0.017			0.08
D-336-99 120-130	0.007			0.08
D-336-99 130-140	0.023			0.09
D-336-99 140-150	0.013			0.08
D-336-99 150-160	0.011			0.06
D-336-99 160-170	0.013			0.08
D-336-99 170-180	0.013			0.06
D-336-99 180-190	0.009			0.07
D-336-99 190-200	0.039			0.08
D-336-99 200-210	0.053		0.079	0.09
D-336-99 210-220	0.008			0.07
D-336-99 220-230	0.009			0.06
D-336-99 230-240	0.013			0.06
51479	0.553			4.45

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 0052555-IN
INVOICE DATE: 02/25/99

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
0-336-99 0-240	PRODUCTION	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
25	SAMPLES RECEIVED	.00	.00
24	DRYING	3.00	72.00
24	JAW CRUSHING CHARGE	3.90	93.60
24	COARSE MILLING CHARGE	13.50	324.00
24	SPLITTING CHARGE	2.40	57.60
24	FINE MILLING CHARGE	2.00	48.00
25	Au (1 A.T. FIRE ASSAY)	8.00	200.00
2	Au ANALYSES/GRAVIMETRIC	8.75	17.50
25	HYDROCHLORIC/NITRIC DIGESTION	2.00	50.00
25	Ag ANALYSES	1.00	25.00

86-5035-477

NET INVOICE:	887.70
LESS DISCOUNT:	177.54
FREIGHT:	.00
INVOICE TOTAL:	710.16

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052555

PO BOX 11530
RENO NV,USA
Ph.(775) 356-0606, Fax.(775) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

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CLIENT REFERENCE No: D-336-99 0-240 RECEIVED : 18 FEB 1999

No. SAMPLES : 25 REPORTED : 18 FEB 1999

MAIN SAMPLE TYPE : DRILL CORE

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AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052555

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD PRODUCTION
REFERENCE : D-336-99 0-240

REPORTED : 18 FEB 1999

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-336-99 000-010	0.004			0.06
D-336-99 010-020	0.004			0.04
D-336-99 020-030	0.004			0.04
D-336-99 030-040	0.019			0.08
D-336-99 040-050	0.007			0.06
D-336-99 050-060	0.009			0.06
D-336-99 060-070	0.021			0.07
D-336-99 070-080	0.019			0.07
D-336-99 080-090	0.016			0.12
D-336-99 090-100	0.023			0.50
D-336-99 100-110	0.099		0.067	0.15
D-336-99 110-120	0.017			0.08
D-336-99 120-130	0.007			0.08
D-336-99 130-140	0.023			0.09
D-336-99 140-150	0.013			0.08
D-336-99 150-160	0.011			0.06
D-336-99 160-170	0.013			0.08
D-336-99 170-180	0.013			0.06
D-336-99 180-190	0.009			0.07
D-336-99 190-200	0.039			0.08
D-336-99 200-210	0.053		0.079	0.09
D-336-99 210-220	0.008			0.07
D-336-99 220-230	0.009			0.06
D-336-99 230-240	0.013			0.06
51479	0.553			4.45

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

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011-52-69-170035

Other Offices
Lima, Peru
Santiago, Chile
Mendoza, Argentina

Company: HECLA MINING CMP. ROSEBUD

Address: P.O. BOX 2616

City: VIMICA State: NV. Zip: 89446

Telephone Number: (775) 623-6912 Fax Number: (775) 623-6912

Project Name: ROSEBUD PRODUCTION Purchase Order Number: _____

Date Submitted: 2-16-99 Number of Samples: 24

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

D-336-99 SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED
0.0-10.0	150.0-160.0		AU, AG
10.0-20.0	160.0-170.0	CORE	ACCORDING TO HECLA PROTOCOL
20.0-30.0	170.0-180.0		(ROSEBUD)
30.0-40.0	180.0-190.0		
40.0-50.0	190.0-200.0		
50.0-60.0	200.0-210.0		
60.0-70.0	210.0-220.0		
70.0-80.0	220.0-230.0		
80.0-90.0	230.0-240.0		
90.0-100.0			
100.0-110.0			
110.0-120.0			
120.0-130.0			
130.0-140.0			
140.0-150.0			

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 / BRIAN MORRIS
S.A.A.

Results to:

✓

Comments:

CLIENT FILE COPY

D-336-99

10' - S 52.3° E ; +2.25

100' - S 53.3° E ; +1.8°

200' - S 55.3° E ; +1°

S 68° E
− 15.7
= S 52.3° E

+2.25°

S 69° E
− 15.7
= S 53.3° E

+1.8°

S 71° E
− 15.7
= S 55.3° E

+1°

10'
15'
D-336 -99 BOX 2
DEPTH 9 - 18

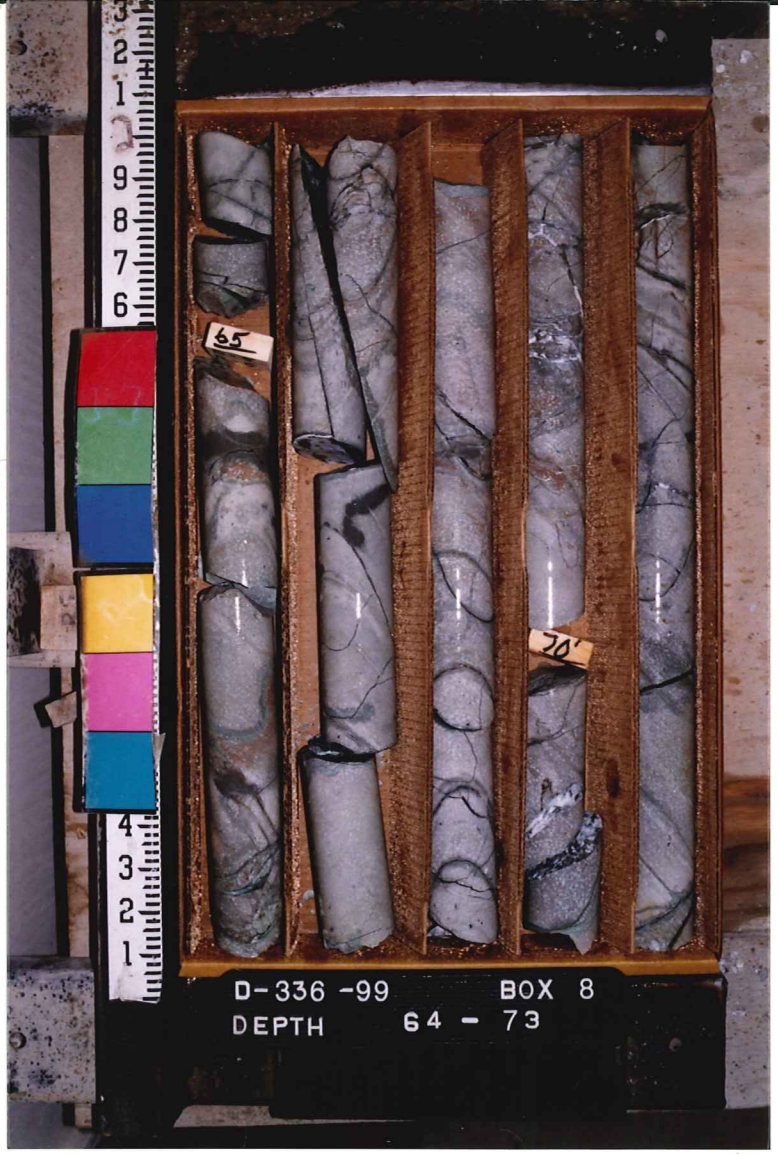
5'
D-336 -99 BOX 1
DEPTH 0 - 9

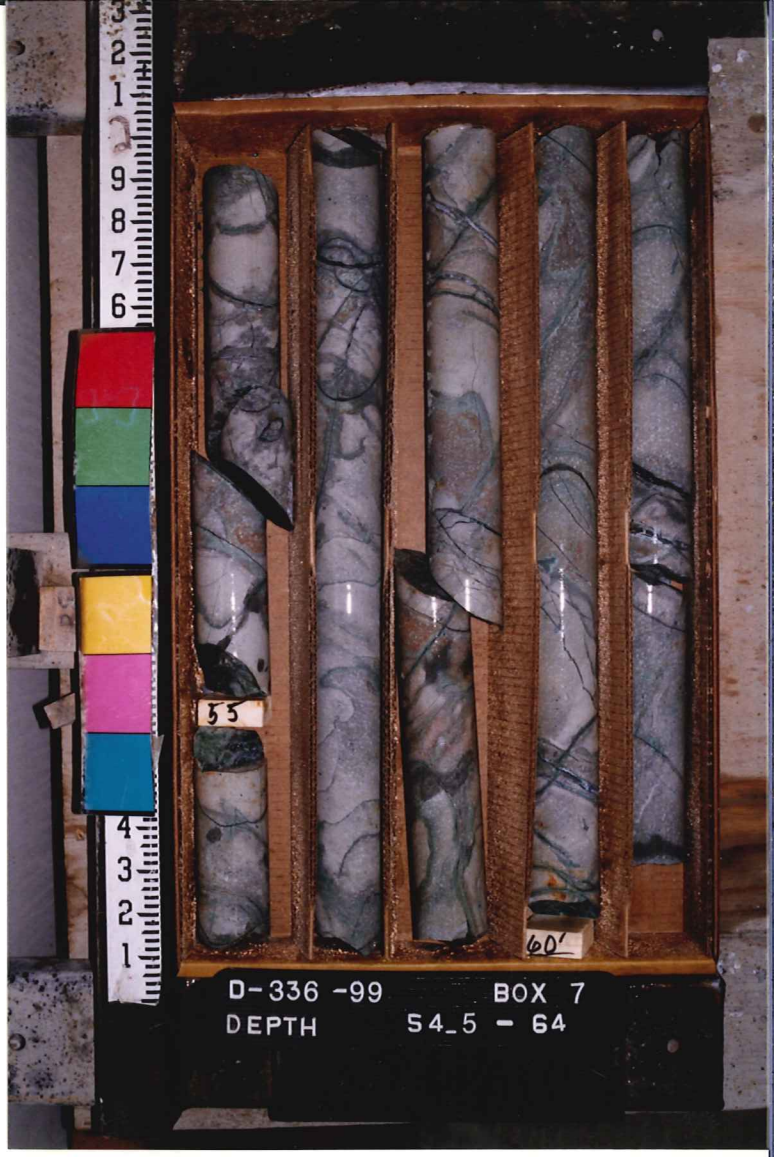
D-336 -99 BOX 3
DEPTH 18 - 27
20'
25'

45'
40'
D-336 -99 BOX 5
DEPTH 36_5 - 45_5

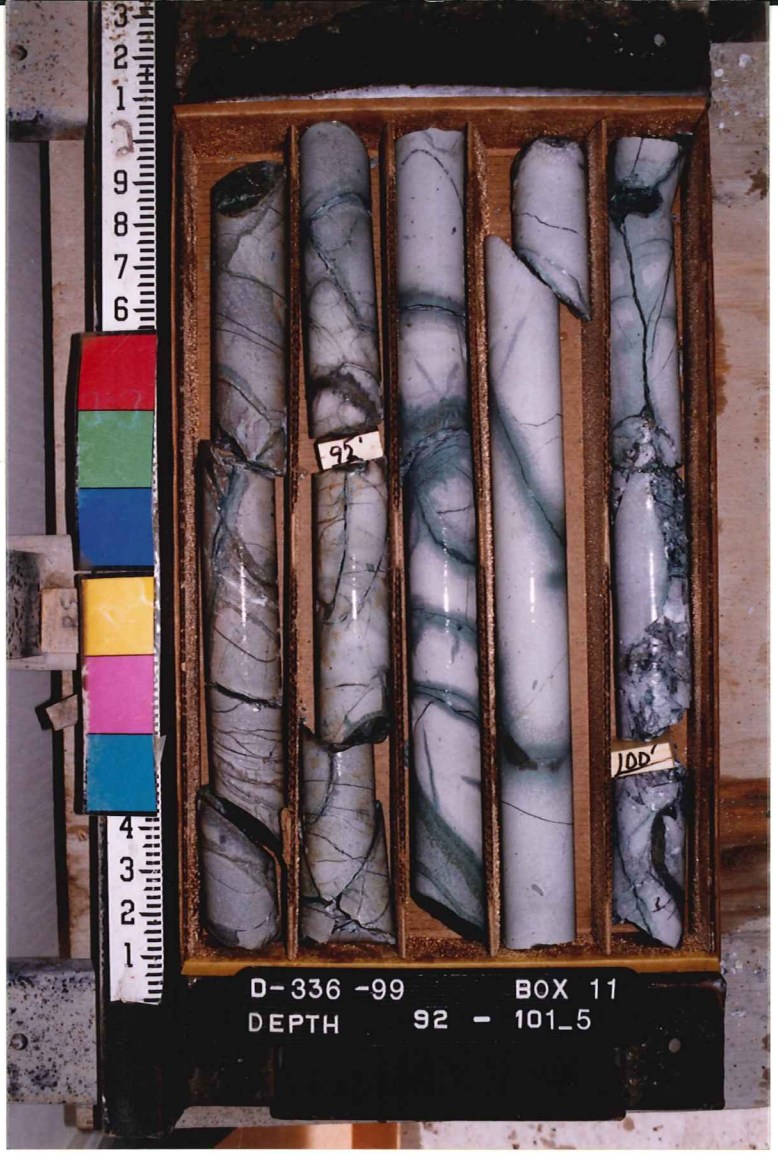
30'
35'
D-336 -99 BOX 4
DEPTH 27 - 36_5

D-336 -99 BOX 6
DEPTH 45_5 - 54_5

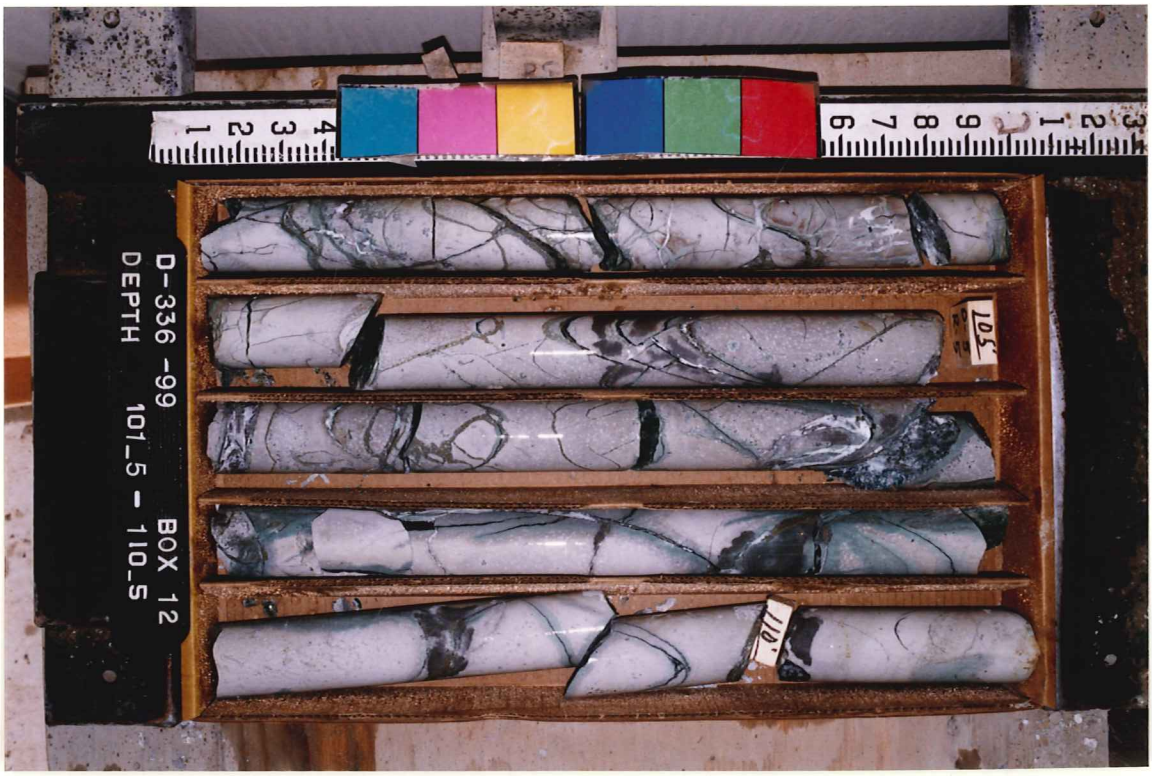

65
70'
D-336 -99 BOX 8
DEPTH 64 - 73


55
60'
D-336 -99 BOX 7
DEPTH 54_5 - 64

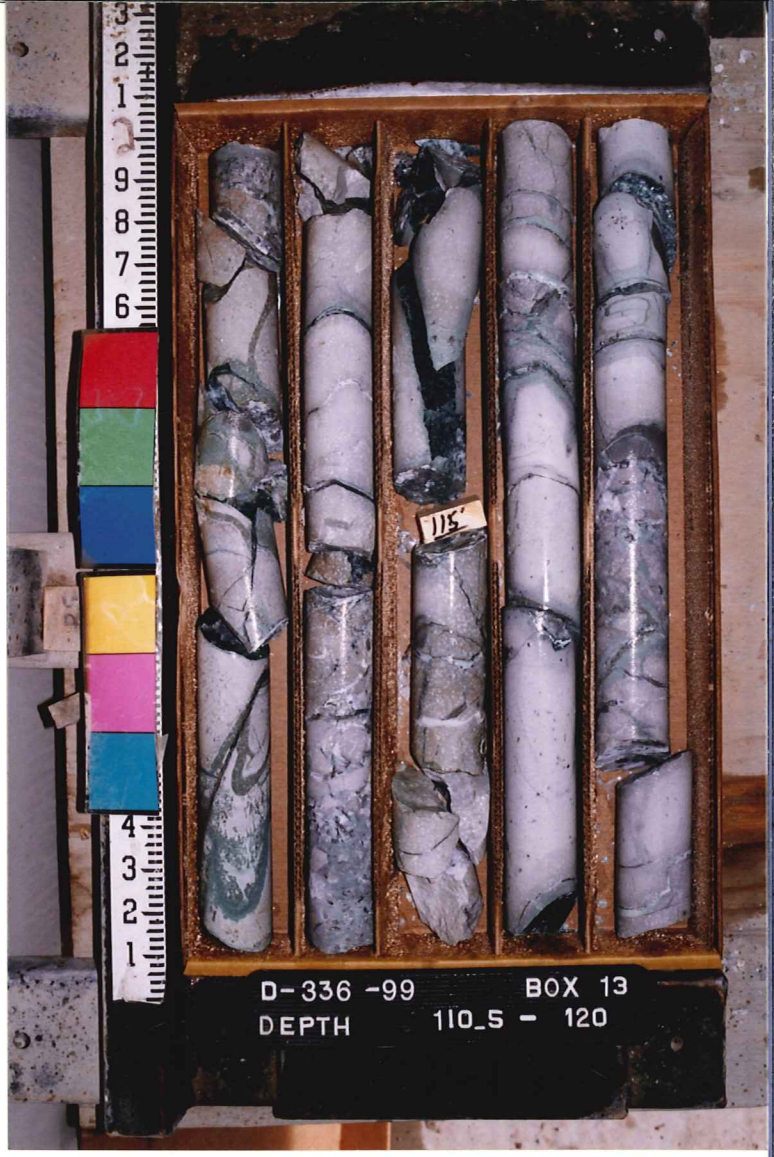
75
80'
D-336 -99 BOX 9
DEPTH 73 - 83

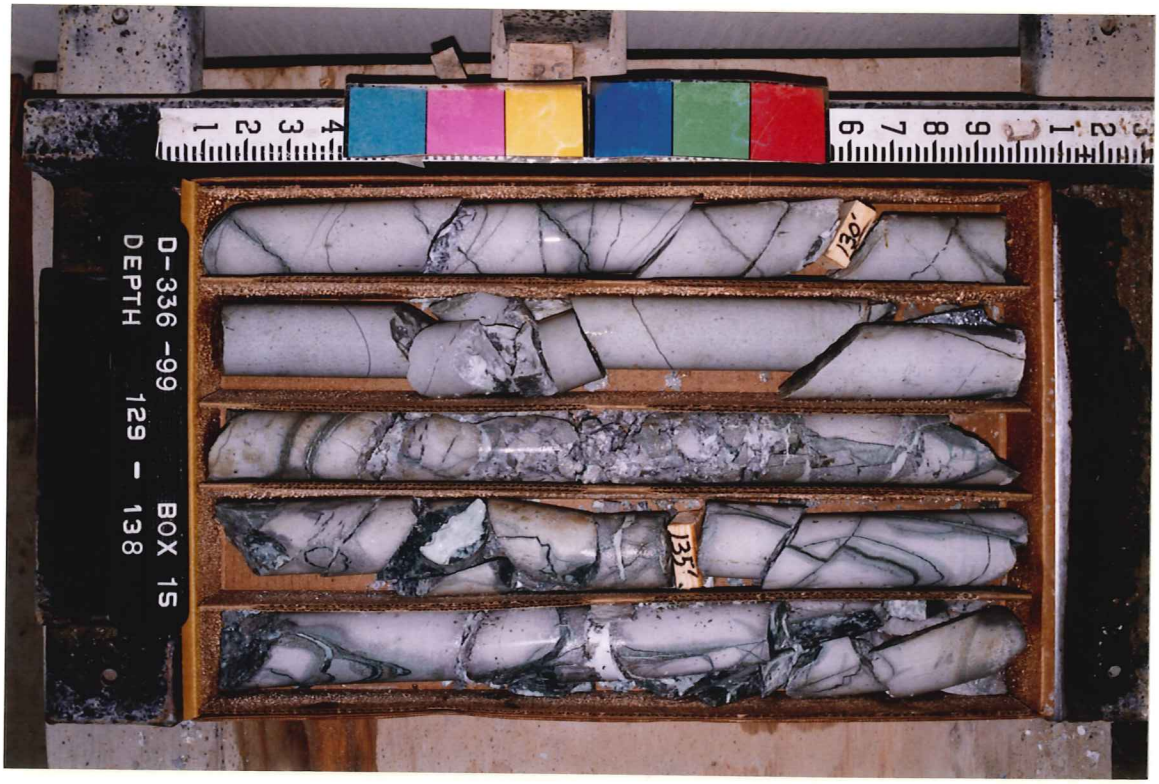

92'
100'
D-336 -99 BOX 11
DEPTH 92 - 101_5

85'
D-336 -99 BOX 10
DEPTH 83 - 92


105'
110'
D-336 -99 BOX 12
DEPTH 101_5 - 110_5

125'
120'
D-336 -99 BOX 14
DEPTH 120 - 129

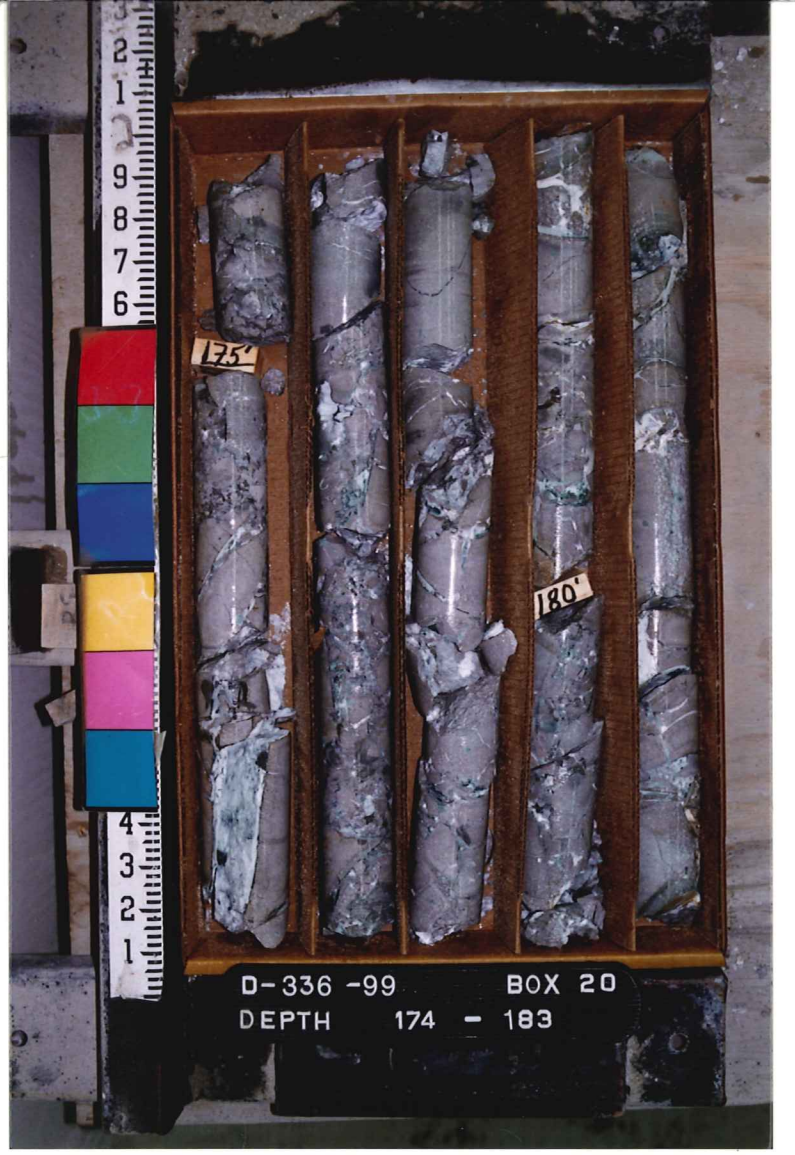

115'
D-336 -99 BOX 13
DEPTH 110_5 - 120


130'
135'
D-336 -99 BOX 15
DEPTH 129 - 138

150'
155'
D-336 -99 BOX 17
DEPTH 147 - 156

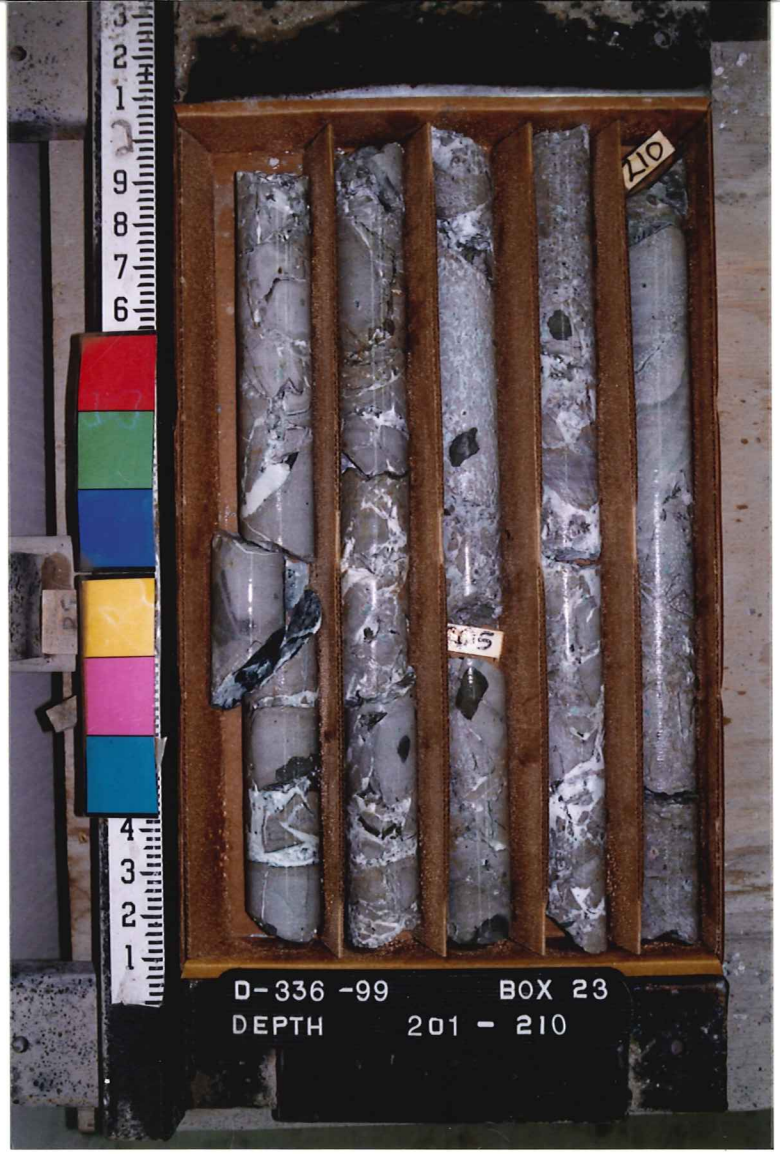
140'
145'
D-336 -99 BOX 16
DEPTH 138 - 147

160
D-336 -99 BOX 18
DEPTH 156 - 165


175'
180'
D-336 -99 BOX 20
DEPTH 174 - 183

170'
165'
D-336 -99 BOX 19
DEPTH 165 - 174

D-336 -99 BOX 21
DEPTH 183 - 191.5
185'
190'


D-336 -99 BOX 23
DEPTH 201 - 210

D-336 -99 BOX 22
DEPTH 191_5 - 201

D-336 -99 BOX 24
DEPTH 210 - 219

230
235
D-336 -99 BOX 26
DEPTH 228 - 237.5

220
225
D-336 -99 BOX 25
DEPTH 219 - 228

240
D-336 -99 BOX 27
DEPTH 237.5 - 240 TD

WELL D33699

DEPTH

PICTURE NO. 10

INCLINATION

OBS. DIR.

COR. DIR.

TOOL FACE

RUN BY

DATE 2899

CHECKED BY

sperry-sun

DRILLING SERVICES

SE
6
80
SE
7
80
SE
8
8

WELL D33699

DEPTH

PICTURE NO. 100

INCLINATION

OBS. DIR.

COR. DIR.

TOOL FACE

RUN BY

DATE 2-8-99

CHECKED BY

sperry-sun

DRILLING SERVICES

SE
80
SE
90
100
SE

WELL D336-99

DEPTH 200

PICTURE NO.

INCLINATION +3

OBS. DIR.

COR. DIR. S55.3°E

TOOL FACE +1°

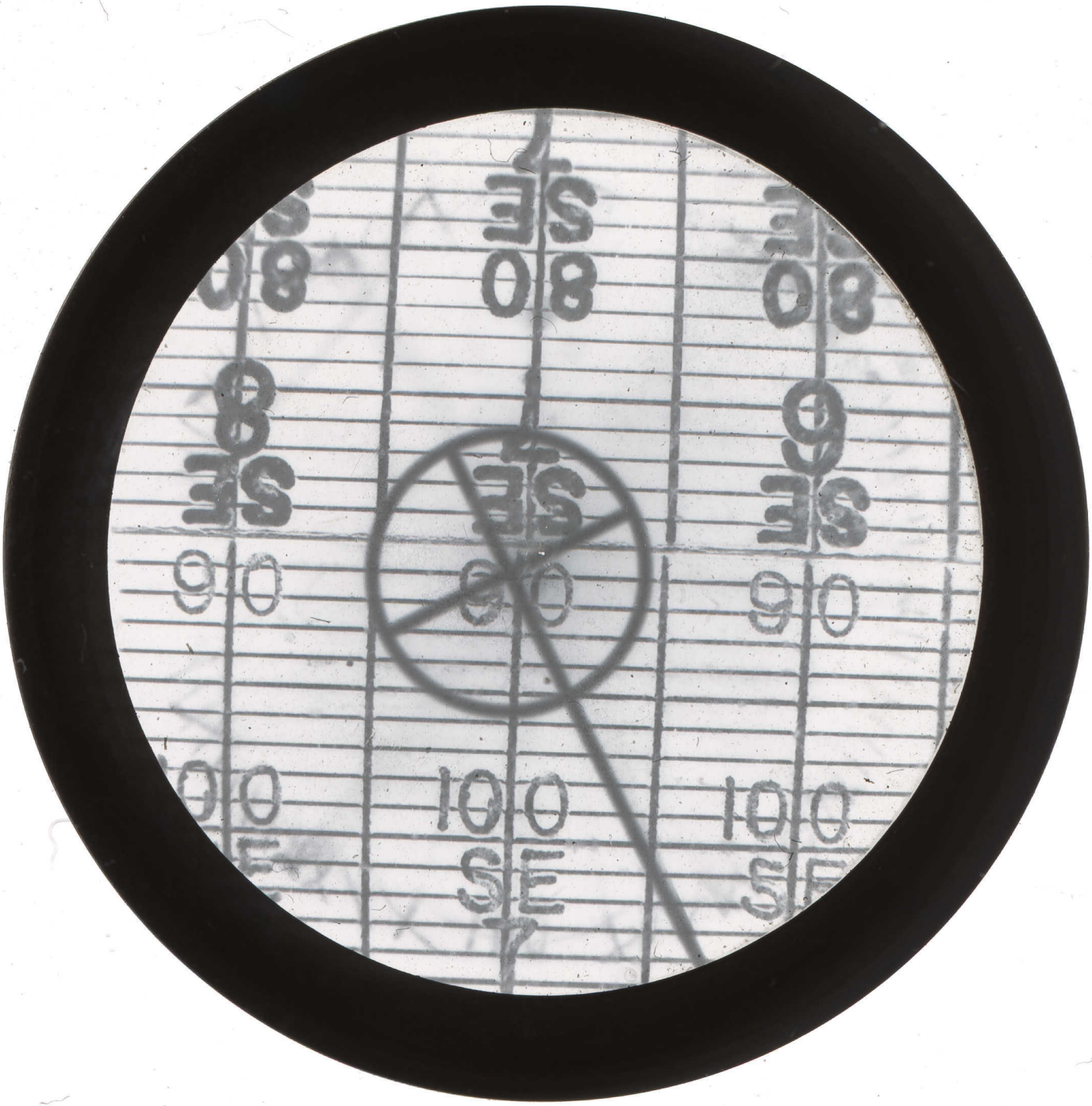
RUN BY

DATE 2-8-99

CHECKED BY

sperry-sun

DRILLING SERVICES


80
SE
90
100
SE