60001236

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-335-99
AUTHOR	[redacted]; K. Allen; L. Madredon
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 ≥ 400 receipt; handwritten notes; downhole camera images 42 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 5/14/08
Initials Date
DB: mch
Initials Date
SCANNED: NJD
Initials Date

Revised: 1/22/08

D-335-99

60001236 4010

6000 1236

- 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	A-335-99	LOCATION	STOPE 25 DEVELOPMENT
PAGE 1 OF 4		NORTHING	
DATE	2/8/99	EASTING	
LOGGED BY	DA	ELEVATION	
SCALE	1" = 10'	AZIMUTH	S44E
TOTAL DEPTH	240'	INCLINATION	+3°

REMARKS

LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	A
		0-61.1' - MASSAT - SPLAT. MASSIVE to slightly PLANAR LAMINATE ASH Tuff or FLOW 0-7.7 - LT green to LT TAN IN color w/ up to 1/4" Light GREEN CLAY SEAMS/FRACTURES	10 20 30 40 50		0-11.5 LT GREEN CLAY + sulfide FRACTURES @ 20-30° to CA.	0-7.7' - Argillized & Slightly propylitized moderately soft w/ w/minor CaCO3 + marc	0	7.7					
						7.7-11.5 - Darker tan color w/minor than previous + minor CaCO3 BRECCIA (AUTO BX) TEXTURE	7.7	11.5					
						11.5-16.7 - Silicified & open SPACE BRECCIA contains marc + silic +/- white clay filled FRACTURES	11.5	16.7					
						16.7-25 - INCREASED CaCO3 + pyrite + MARCASITE fractures up to 1" WIDE	16.7	25					
						25-37.1' - MINOR CaCO3 ± SiO2 ± Pyrite ± white clay	25	37.1					
		37.1-40' - slightly vesicular texture w/ white clay IN vesicles.				37.1-40' - SiO2 fractures + WHITE CLAY + MARC + Py. MODERATE OPEN SPACE	37.1	40					
					GREEN CLAY FRACTURES @ 30-40° to CA Cut By: WHITE CLAY fractures @ 50-60° to CA	40-49.2 - WHITE + LT GREEN clay filled fractures GRI	40	49.2					

HOLE NUMBER _____ PAGE 2 OF 4

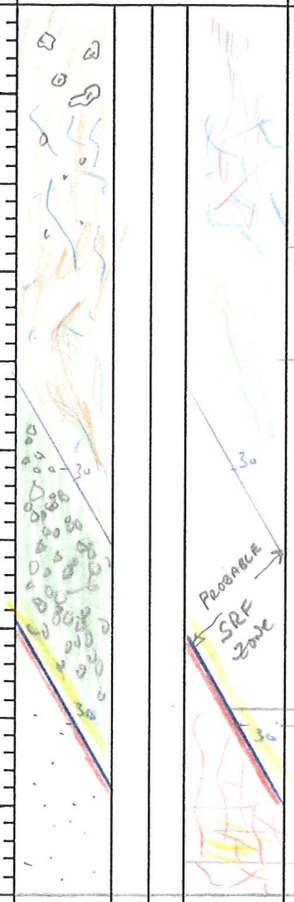
LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
			60	55°	49.2-61.1'-	49.2-61.1'- MINOR LT GREEN CLAY FRACTURES @ 30-50° to CA. ±PY	49.2	61.1				
		61.1-183.8' LST WB? - FINE- TO COARSE-GRAINED, VARIABLE VESICULAR/SLIGHTLY PLANAR LAMINATED FLOW. W/VESICLE ALIGNMENT @ 30-50° to CA.	70			61.1-66.5'- COARSE-GRAINED VESICLES FILLED W/ GREEN CLAY. MINOR WHITE CLAY + MARCASITE + CACO3 FRACTURES @ 60° & 30° to CA.	61.1	66.5				
							66.5	70				
						66.5-70'- FINER-GRAINED VESICLES W/ INCREASED CACO3 + WHITE CLAY + MARCASITE.	70	75				
			80			70-75'- WHITE CLAY + CACO3 VEINLETS ≈ 2/ft @ 30 & 60° to CA	75	80				
						75-80'- INCREASED SILICA SMALL BRECCIA VEINS + CACO3 + MARC	80	90				
			90			80-110'- MODERATE LT GREEN CLAY FRACTURES W/ MINOR CACO3 + Pyrite.	90	100				
			100				100	110				
			110			110-118'- SAME AS 80-110' W/ INCREASED CACO3 + MARCASITE FRACTURES UP + 1/4" + A CLAY ± CACO3 HEALED BY @ 114.-114.5'	110	118				
			120			118-121.3'- INCREASED ARGILLIZATION + Pyrite + MARCASITE + WHITE CLAY + SiO2	118	121.3				

HOLE NUMBER _____ PAGE 3 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
			130, 140, 150, 160, 170, 180, 190			121.3-130' - PROPYLITIZED w/minor DARK GREEN (CHLORITIC) FRACTURES ± CaCO3	121.3	130				
						130-135' - INCREASED ARGILLIZATION + DARK GREEN CHLORITE FRACTURES + Py + MARC. +/- WHITE CLAY	130	135				
						135-139.2' - MODERATE TO STRONG LT GREEN CLAY AND/OR SILICA HEALED BRECCIA w/ MARCASITE + Pyrite	135	139.2				
						139.2-183.8 - PROPYLITIZED w/MODERATE to STRONG FRACTURES filled w/ LT GREEN CLAY + DARK GREEN CHLORITE ± CaCO3 veinlets w/MARCASITE.	139.2	150				
							150	160				
							160	170				
							170	180				
		LST WB - AUTO BX 183.8-216' - MATRIX to CLAST SUPPORTED AUTO BRECCIA w/ SUB-ANGULAR to SUB-ROUNDED CLASTS IN A BROWNISH MATRIX. CLASTS & MATRIX? APPEAR to BE slightly VESICULAR		SS		183.8-190' - MODERATELY CaCO3 ± SiO2 FILLED TECTONIC BRECCIA w/ MARCASITE & Pyrite.	180	183.8				
							183.8	190				

HOLE NUMBER _____ PAGE 4 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
						190-195' - moderately veined & brecciated w/ $CaCO_3$ + LT GREEN CLAY ± MARC	190	195				
						195-203.6 - strong tect BRECCIA w/ MARCASITE BLEBBES + $CaCO_3$.	195	200				
							200	203.6				
						203.6-210' - minor $CaCO_3$ + MARC veining + LT GREEN CLA.	203.6	210				
						210-216 - minor LT GREEN CLAY FRACTURES	210	216				
					216 - Possible small fault plane @ 30° to CA.	216-229.5 - Propylitized.						
						229.5-230.5 - Silicified	216	229.5				
							229.5	230.5				
						230.5-238.1' - moderate to strong LT to DK GRAY SILICA + sulfide veining	230.5	238.1				
						238.1-240 - minor DK GRAY SILICA veining	238.1	240				
		TOS 216-230.5 - Lapilli to COARSE SAND SIZED, CLAST SUPPORTED EPICLASTIC w/ FEW small fragments of ALS PHYLLITE. Clasts are Rounded to SUB-ANGULAR.	200									
		Below 230.5-240 TD - FINE-GRAINED (APHANITIC), LT GREEN to CREEM COLORED FLOW.	210									
			220									
			230									
		TD = 240'	240									



HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-335-99 DATE: 2/8/99 LOGGED BY: KDA 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	5	80	100	74										
5	10	96	96	88										
10	15	96	96	96										
15	20	98	98	94										
20	25	100	100	100										
25	30	100	100	82										
30	35	102	102	102										
35	40	101	101	98										
40	45	100	100	100										
45	50	100	100	94										
50	55	98	98	96										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-335-99 DATE: 2/8/99 LOGGED BY: KAA PAGE 2 OF 5

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)
55	60	102	102	98										
60	65	100	100	96										
65	70	98	98	90										
70	75	100	100	96										
75	80	100	100	86										
80	85	100	100	96										
85	90	98	98	80										
90	95	96	96	76										
95	100	92	92	70										
100	105	96	96	70										
105	110	100	100	68										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-335-99 DATE: 2/8/99 LOGGED BY: KAA PAGE 3 OF 5

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)
110	115	101	101	97										
115	120	100	100	56										
120	125	100	100	72										
125	130	98	98	97.2										
130	135	100	100	72										
135	140	100	100	90										
140	145	96	96	70										
145	150	102	102	82										
150	155	100	100	60										
155	160	88	100	56										
160	165	100	100	56										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

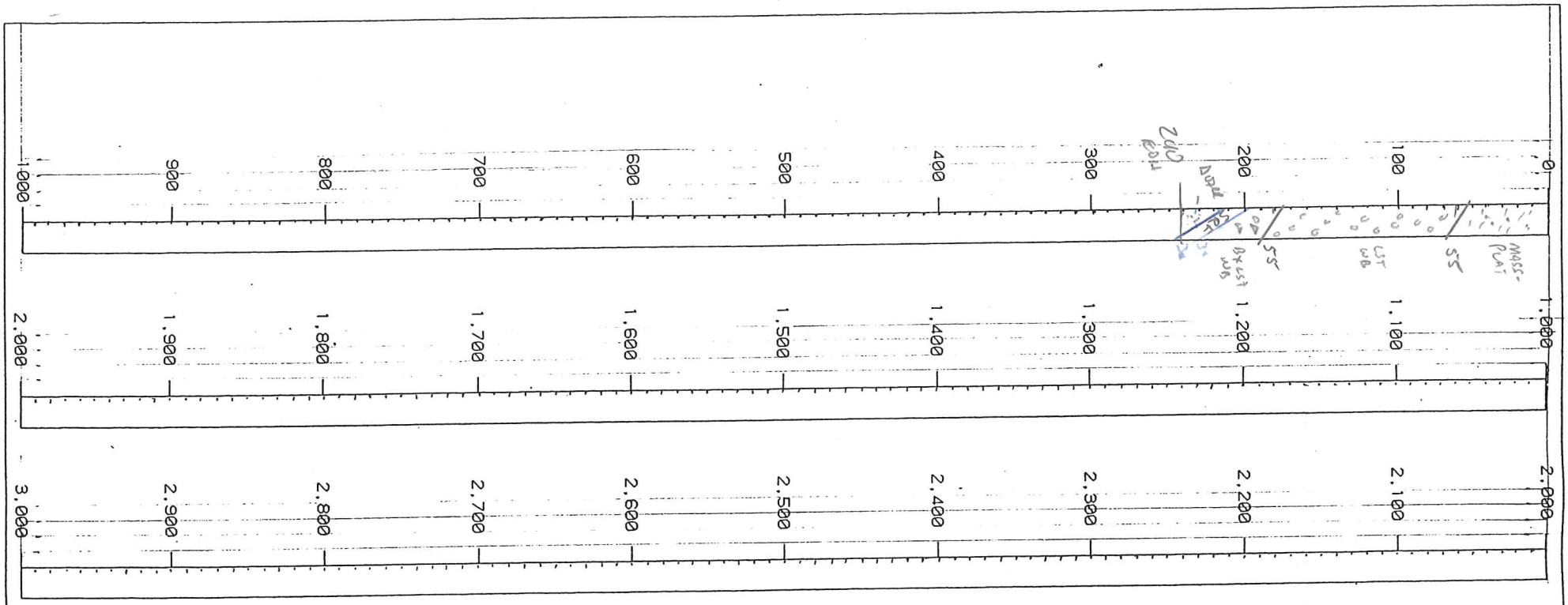
HOLE # D-335-99 DATE: 2/8/99 LOGGED BY: KAA PAGE 4 OF 5

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	170	100	100	58										
170	175	100	100	84										
175	180	100	100	82										
180	185	100	100	86										
185	190	100	100	100										
190	195	102	102	102										
195	200	98	98	98										
200	205	100	100	100										
205	210	102	102	102										
210	215	102	102	102										
215	220	100	100	100										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # A-335-99 DATE: 2/8/99 LOGGED BY: DA 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	225	96	96	96										
225	230	100	100	100										
230	235	102	102	102										
235	240	98	98	98										
	TD = 240													



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:	FINAL COLLAR COORDINATES	START	FINISH	LOGGED BY KAA
	NORTH	HOLE TYPE		SURVEYED TO
LAB	EAST			
JOB #	ELEV	BEARING	ANGLE	T. D. 240
DRILLING COMPANY Long Year UG	DRILLER PAT			

The Rosebud Mining Company LLC

PAGE 1 OF 1

HOLE # D-335-99

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052494

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(775) 356-0506, Fax.(775) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

:

:

:

CLIENT REFERENCE No: D-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 2 REPORTED : 23 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
Ag(OZ)	D210	10%	OPT	0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052494

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 23 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
D-335-99 230.5-238.1	0.004		0.05
D-335-99 238.1-240.0	0.002		0.05

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 0052494-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
D-335-99	KURT ALLEN	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
2	SAMPLES RECEIVED	.00	.00
2	DRYING	3.00	6.00
2	JAW CRUSHING CHARGE	3.90	7.80
2	COARSE MILLING CHARGE	13.50	27.00
2	SPLITTING CHARGE	2.40	4.80
2	FINE MILLING CHARGE	2.00	4.00
2	Au (1 A.T. FIRE ASSAY)	8.00	16.00
2	HYDROCHLORIC/NITRIC DIGESTION	2.00	4.00
2	Ag ANALYSES	1.00	2.00

86-5030-477
BWM

NET INVOICE:	71.60
LESS DISCOUNT:	14.32
FREIGHT:	.00
INVOICE TOTAL:	57.28

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ANALYSIS REPORT SP052494

American Assay Laboratories

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HECLA MINING COMPANY

COPIES TO : KURT ALLEN

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CLIENT REFERENCE No: D-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 2 REPORTED : 23 FEB 1999

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
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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 : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052494

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 23 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
D-335-99 230.5-238.1	0.004		0.05
D-335-99 238.1-240.0	0.002		0.05

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ANALYSIS REPORT SP052485

American Assay Laboratories

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-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 34 REPORTED : 22 FEB 1999

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
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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 SP052485

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-335-99 0.0-7.7	0.004			0.08
D-335-99 7.7-11.5	0.112		0.105	0.16
D-335-99 11.5-16.7	0.011			0.07
D-335-99 16.7-25.0	0.023			0.06
D-335-99 25.0-37.1	0.007			0.06
D-335-99 37.1-40.0	0.010			0.08
D-335-99 40.0-49.2	0.012			0.08
D-335-99 49.2-61.1	0.022			0.09
D-335-99 61.1-66.5	0.007			0.09
D-335-99 66.5-70.0	0.012			0.08
D-335-99 70-75	0.010			0.10
D-335-99 75-80	0.018			0.13
D-335-99 80-90	0.011			0.07
D-335-99 90-100	0.023			0.08
D-335-99 100-110	0.020			0.08
D-335-99 110-118	0.099		0.085	0.22
D-335-99 118.0-121.3	0.090		0.092	0.40
D-335-99 121.3-130.0	0.031			0.11
D-335-99 130-135	0.040			0.09
D-335-99 135.0-139.2	0.037			0.12
D-335-99 139.2-150.0	0.020			0.14
D-335-99 150-160	0.063		0.071	0.14
D-335-99 160-170	0.036			0.16
D-335-99 170-180	0.020			0.12
D-335-99 180.0-183.8	0.014			0.08

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052485

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-335-99 183.8-190.0	0.149		0.145	0.33
D-335-99 190-195	0.465		0.495	1.07
D-335-99 195-200	0.127		0.113	0.68
D-335-99 200.0-203.6	0.290		0.259	0.46
D-335-99 203.6-210.0	0.116		0.140	0.38
D-335-99 210-216	0.072		0.056	0.08
D-335-99 216.0-229.5	0.014			0.06
D-335-99 229.5-230.5	0.298		0.274	0.39
51493	0.129			2.46

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052485

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-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 34 REPORTED : 22 FEB 1999

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
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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 SP052485

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-335-99 0.0-7.7	0.004			0.08
D-335-99 7.7-11.5	0.112		0.105	0.16
D-335-99 11.5-16.7	0.011			0.07
D-335-99 16.7-25.0	0.023			0.06
D-335-99 25.0-37.1	0.007			0.06
D-335-99 37.1-40.0	0.010			0.08
D-335-99 40.0-49.2	0.012			0.08
D-335-99 49.2-61.1	0.022			0.09
D-335-99 61.1-66.5	0.007			0.09
D-335-99 66.5-70.0	0.012			0.08
D-335-99 70-75	0.010			0.10
D-335-99 75-80	0.018			0.13
D-335-99 80-90	0.011			0.07
D-335-99 90-100	0.023			0.08
D-335-99 100-110	0.020			0.08
D-335-99 110-118	0.099		0.085	0.22
D-335-99 118.0-121.3	0.090		0.092	0.40
D-335-99 121.3-130.0	0.031			0.11
D-335-99 130-135	0.040			0.09
D-335-99 135.0-139.2	0.037			0.12
D-335-99 139.2-150.0	0.020			0.14
D-335-99 150-160	0.063		0.071	0.14
D-335-99 160-170	0.036			0.16
D-335-99 170-180	0.020			0.12
D-335-99 180.0-183.8	0.014			0.08

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP052485

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-335-99 183.8-190.0	0.149		0.145	0.33
D-335-99 190-195	0.465		0.495	1.07
D-335-99 195-200	0.127		0.113	0.68
D-335-99 200.0-203.6	0.290		0.259	0.46
D-335-99 203.6-210.0	0.116		0.140	0.38
D-335-99 210-216	0.072		0.056	0.08
D-335-99 216.0-229.5	0.014			0.06
D-335-99 229.5-230.5	0.298		0.274	0.39
51493	0.129			2.46

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 0052485-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
D-335-99	KURT ALLEN	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
34	SAMPLES RECEIVED	.00	.00
33	DRYING	3.00	99.00
33	JAW CRUSHING CHARGE	3.90	128.70
33	COARSE MILLING CHARGE	13.50	445.50
33	SPLITTING CHARGE	2.40	79.20
33	FINE MILLING CHARGE	2.00	66.00
34	Au (1 A.T. FIRE ASSAY)	8.00	272.00
11	Au ANALYSES/GRAVIMETRIC	8.75	96.25
34	HYDROCHLORIC/NITRIC DIGESTION	2.00	68.00
34	Ag ANALYSES	1.00	34.00

86-5030-477
BWM

NET INVOICE:	1,288.65
LESS DISCOUNT:	257.73
FREIGHT:	.00
INVOICE TOTAL:	1,030.92

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052485

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-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 34 REPORTED : 22 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.

02/23/1999 16:03 7023561413 AMERICAN ASSAY LABS PAGE 01
7023561413

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052485

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-335-99 0.0-7.7	0.004			0.08
D-335-99 7.7-11.5	0.112		0.105	0.16
D-335-99 11.5-16.7	0.011			0.07
D-335-99 16.7-25.0	0.023			0.06
D-335-99 25.0-37.1	0.007			0.06
D-335-99 37.1-40.0	0.010			0.08
D-335-99 40.0-49.2	0.012			0.08
D-335-99 49.2-61.1	0.022			0.09
D-335-99 61.1-66.5	0.007			0.09
D-335-99 66.5-70.0	0.012			0.08
D-335-99 70-75	0.010			0.10
D-335-99 75-80	0.018			0.13
D-335-99 80-90	0.011			0.07
D-335-99 90-100	0.023			0.08
D-335-99 100-110	0.020			0.08
D-335-99 110-118	0.099		0.085	0.22
D-335-99 118.0-121.3	0.090		0.092	0.40
D-335-99 121.3-130.0	0.031			0.11
D-335-99 130-135	0.040			0.09
D-335-99 135.0-139.2	0.037			0.12
D-335-99 139.2-150.0	0.020			0.14
D-335-99 150-160	0.063		0.071	0.14
D-335-99 160-170	0.036			0.16
D-335-99 170-180	0.020			0.12
D-335-99 180.0-183.8	0.014			0.08

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052485

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES		Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-335-99 183.8-190.0	6.2'	0.149		0.145	0.33
D-335-99 190-195	5.0'	0.465		0.495	1.07
D-335-99 195-200	5.0'	0.127		0.113	0.68
D-335-99 200.0-203.6	3.6	0.290		0.259	0.46
D-335-99 203.6-210.0	6.4	0.116		0.140	0.38
D-335-99 210-216		0.072		0.056	0.08
D-335-99 216.0-229.5		0.014			0.06
D-335-99 229.5-230.5		0.298		0.274	0.39
51493		0.129			2.46

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052494

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-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 2 REPORTED : 12 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
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052494

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 12 FEB 1999

SAMPLES	Au(OZ.)	Au(RZ.)	Ag(OZ.)
D-335-99 230.5-238.1	0.004		
D-335-99 238.1-240.0	0.002		

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052494

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CLIENT REFERENCE No: D-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 2 REPORTED : 23 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
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

02/23/1999 14:42 7023561413 AMERICAN ASSAY LABS PAGE 01
7023561413

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052494

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 23 FEB 1999

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
D-335-99 230.5-238.1	0.004		0.05
D-335-99 238.1-240.0	0.002		0.05

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052485

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-335-99 RECEIVED : 10 FEB 1999

No. SAMPLES : 34 REPORTED : 22 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

PROVISIONAL REPORT SP052485

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-335-99 0.0-7.7	0.004			
D-335-99 7.7-11.5	0.112		0.105	
D-335-99 11.5-16.7	0.011			
D-335-99 16.7-25.0	0.023			
D-335-99 25.0-37.1	0.007			
D-335-99 37.1-40.0	0.010			
D-335-99 40.0-49.2	0.012			
D-335-99 49.2-61.1	0.022			
D-335-99 61.1-66.5	0.007			
D-335-99 66.5-70.0	0.012			
D-335-99 70-75	0.010			
D-335-99 75-80	0.018			
D-335-99 80-90	0.011			
D-335-99 90-100	0.023			
D-335-99 100-110	0.020			
D-335-99 110-118	DTF			
D-335-99 118.0-121.3	DTF			
D-335-99 121.3-130.0	0.031			
D-335-99 130-135	0.040			
D-335-99 135.0-139.2	0.037			
D-335-99 139.2-150.0	DTF			
D-335-99 150-160	0.063		0.071	
D-335-99 160-170	0.036			
D-335-99 170-180	0.020			
D-335-99 180.0-183.8	0.014			

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP052485

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-335-99

REPORTED : 22 FEB 1999

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-335-99 183.8-190.0	0.149		0.145	
D-335-99 190-195	0.465		0.495	
D-335-99 195-200	0.127		0.113	
D-335-99 200.0-203.6	0.290		0.259	
D-335-99 203.6-210.0	0.116			
D-335-99 210-216	0.072		0.056	
D-335-99 216.0-229.5	0.014			
D-335-99 229.5-230.5	0.298		0.274	
51493	DTF			

D-335-99

10' S41.8°E +1.5°

100' S42.3°E +1.5°

200' S42.3°E +1.5

57.5
-15.7
S41.8°E +1.5°

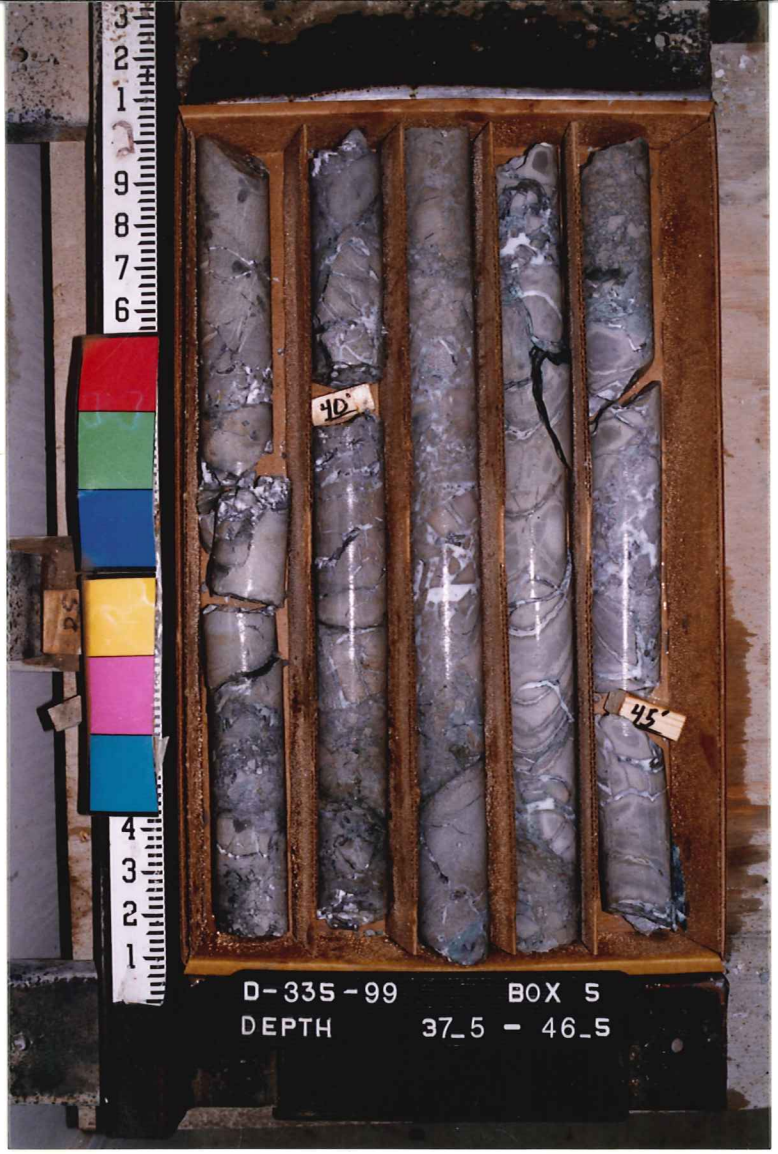
58
S42.3°E +1.5

58°
-15.7
S42.3°E +1.5°

15'
10
D-335-99 BOX 2
DEPTH 9 - 19

5
D-335-99 BOX 1
DEPTH 0 - 9

20'
25'
D-335-99 BOX 3
DEPTH 19 - 28_5


40'
45'
D-335-99 BOX 5
DEPTH 37_5 - 46_5

35'
30'
D-335-99 BOX 4
DEPTH 28_5 - 37_5

50'
55'
D-335-99 BOX 6
DEPTH 46_5 - 56

70'
65'
D-335-99 BOX 8
DEPTH 65 - 74_5

60'
D-335-99 BOX 7
DEPTH 56 - 65

75'
80'
D-335-99 BOX 9
DEPTH 74_5 - 83

95'
100'
D-335-99 BOX 11
DEPTH 92 - 101

85'
90'
D-335-99 BOX 10
DEPTH 83 - 92

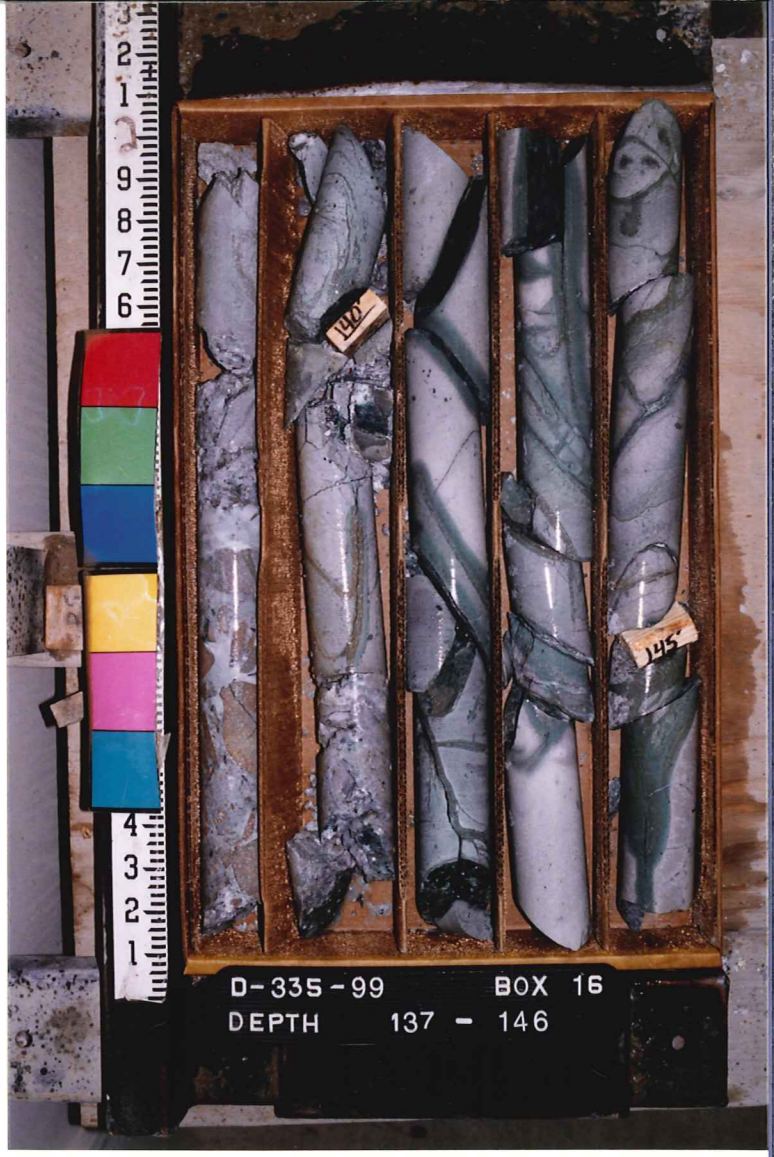
105'
110'
D-335-99 BOX 12
DEPTH 101 - 110

120'
125'
D-335-99 BOX 14
DEPTH 119 - 128

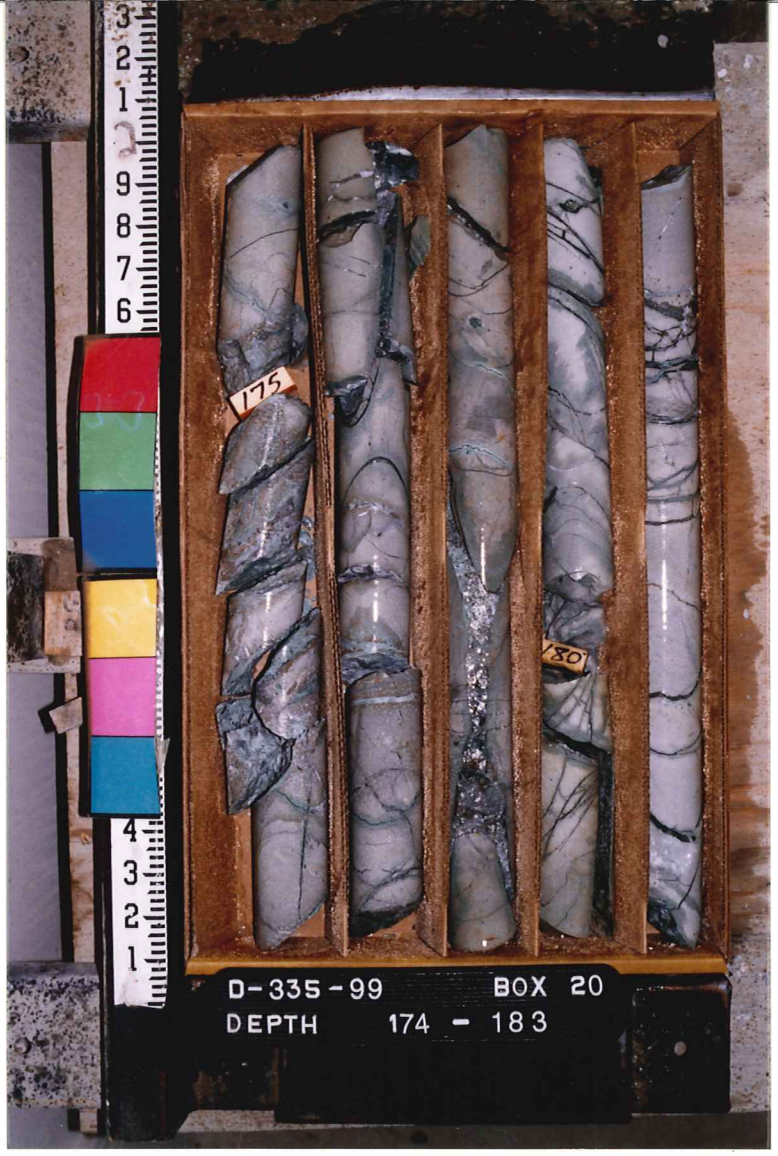
115'
D-335-99 BOX 13
DEPTH 110 - 119

130'
135'
D-335-99 BOX 15
DEPTH 128 - 137

D-335-99 BOX 17
DEPTH 146 - 155
155'
150'


D-335-99 BOX 16
DEPTH 137 - 146
140'
145'

D-335-99 BOX 18
DEPTH 155 - 164.5
155'
160'


175
180
D-335-99 BOX 20
DEPTH 174 - 183

165
170
D-335-99 BOX 19
DEPTH 164_5 - 174

D-335-99 BOX 21
DEPTH 183 - 192
185
190

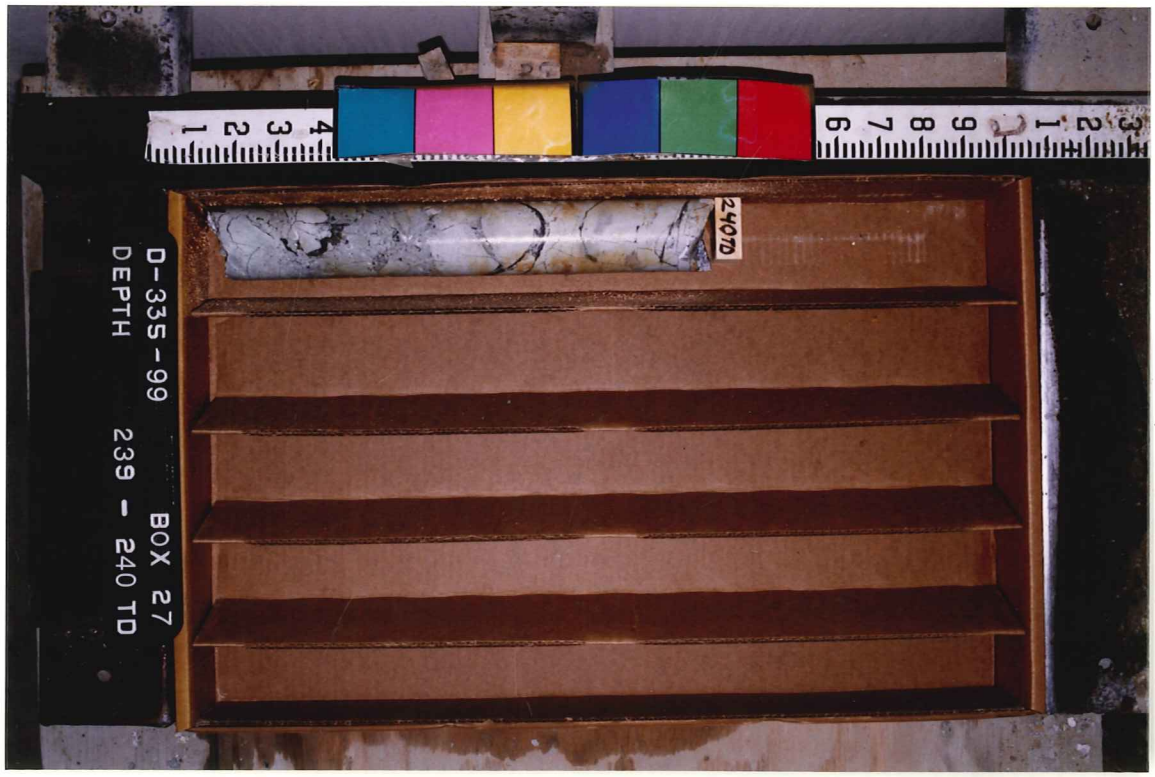
205
210
D-335-99 BOX 23
DEPTH 201_5 - 211

195
200
D-335-99 BOX 22
DEPTH 192 - 201_5

D-335-99 BOX 24
DEPTH 211 - 220
215
220

235
D-335-99 BOX 26
DEPTH 229_5 - 239

225
D-335-99 BOX 25
DEPTH 220 - 229_5


240TD
D-335-99 BOX 27
DEPTH 239 - 240 TD

WELL D335-19

DEPTH 10'

PICTURE NO.

INCLINATION +3

OBS. DIR.

COR. DIR.

TOOL FACE

RUN BY

DATE 2-7-98

CHECKED BY

sperry-sun

DRILLING SERVICES

SE
90
SE
90
SE
90
80
SE
80
SE
80
SE

WELL D335-99

DEPTH 100

PICTURE NO.

INCLINATION +3

OBS. DIR.

COR. DIR.

TOOL FACE

RUN BY

DATE 2-7-99

CHECKED BY

sperry-sun
DRILLING SERVICES

SE
80
90
SE
90
100
SE
100
SE
SE
90
100
SE

WELL D335-99

DEPTH 200

PICTURE NO.

INCLINATION +3

OBS. DIR.

COR. DIR.

TOOL FACE

RUN BY

DATE 2-7-99

CHECKED BY

sperry-sun

DRILLING SERVICES

100
SE
90
SE
5
80
SE
100
SE
90
SE
6
80
SE
90
SE
7