6000 0696

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. SL-D 400-00
AUTHOR	D. Mackerrow; L. Machedon; K. Allen; B. Morris
DATE OF DOC(S)	2000
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; geology; assay; total depth 593' receipts; down hole camera images; hand written notes 54p. 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: DD 4/28/08
Initials Date
DB:
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

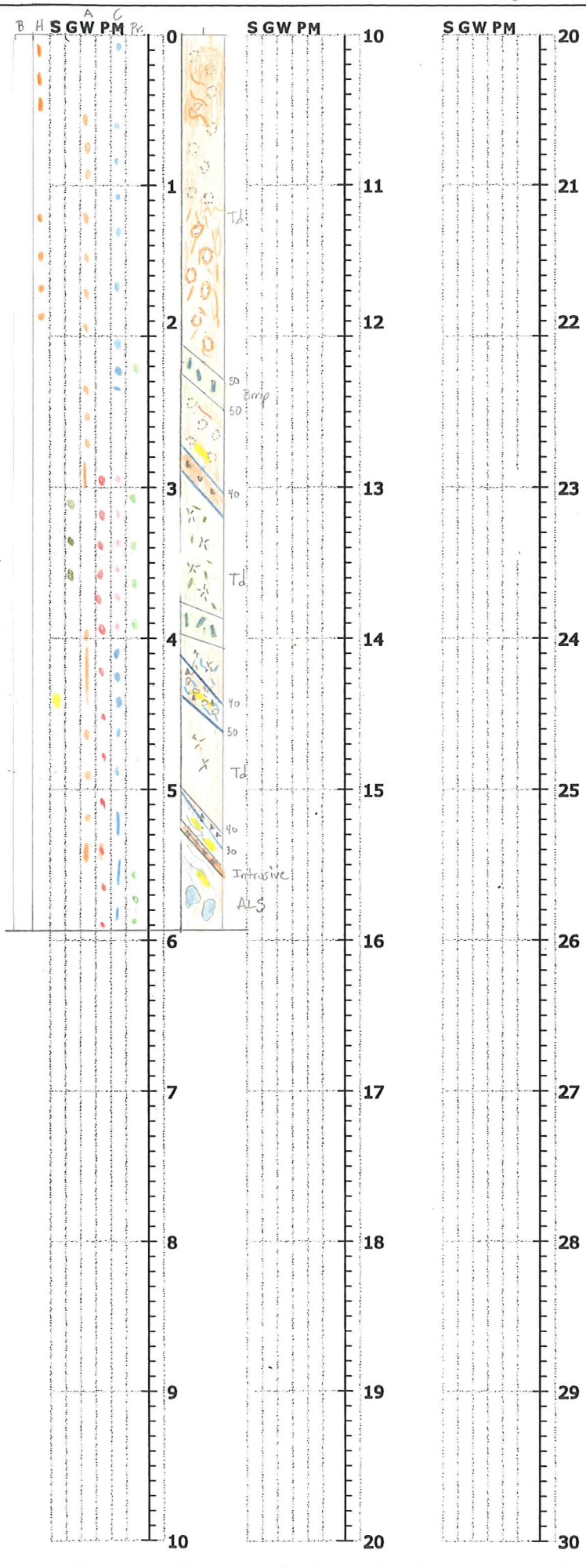
SL-D 400-00

60000696
4010

6000 0696

ROSEBUD MINING COMPANY, LLC.

HOLE #	SL-D400-00
FINISH HOLE	
START HOLE	
LOGGED BY	D.G. Mackerrow
HOLE TYPE	Core
T.D	593
ANGLE	-50
BEARING	91
SURVEYED TO	453
PAGE 1 OF	1
COLLAR COORDINATES	
NORTH	
EAST	
ELEV	
DRILLER	
DRILLING CO.	Action



ALTERATION INTENSITY

1 WEAK	2 MODERATE	3 STRONG

VERITHIN COLOR

737	SILICIFICATION
751	GREEN CLAY
747½	WHITE CLAY
755	PYRITE
757	MARCASITE

GRAPHIC LOG

VERITHIN COLOR

	BRECCIA
741	FAULT 741
	CONTACT
737	QUARTZ VEIN
741½	CALCITE VEIN
747½	CLAY VEIN
755	PYRITE VEIN

B	Barite
H	Hematite
S	Silicification
P	Py/Marc
G	Chlorite/GreenClay
A	Argillization
C	Carbonate / Calcite
Pr.	Propylatized
	Dozer - Td
	Bmp - Bud Type Porph
	ALS

Hecla
MINING COMPANY

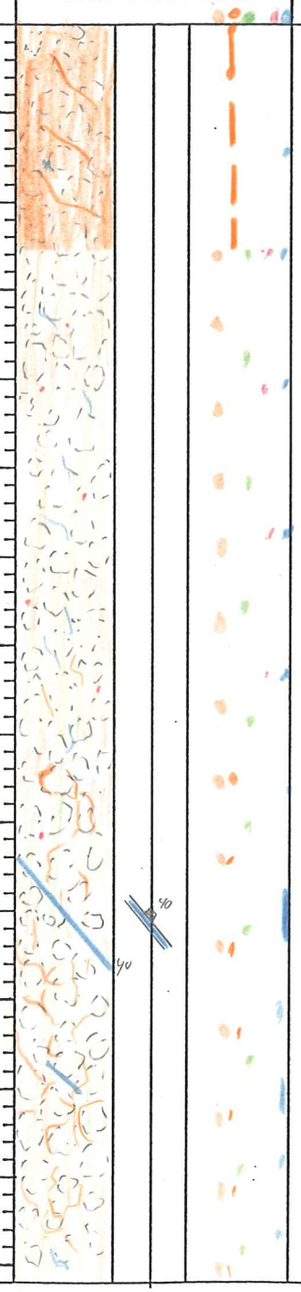
- quartz, chalcedony, silicification
- faults, fractures
- FeOx
- sulfide
- calcite, carbonate
- argillization, white clays
- propylitization
- potassic alteration
- chlorite, chloritic clays

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	SI-D400-00	LOCATION	ST Louis 4335	REMARKS	
PAGE	1 OF	NORTHING			
DATE		EASTING			
LOGGED BY	D.G Mackerrow	ELEVATION			
SCALE	1" = 10'	AZIMUTH			
TOTAL DEPTH	593	INCLINATION			

ITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag
		0 DOZER Hematitic rhyolite auto breccia, fracture surface have brick red iron staining	10 20 30 40 50	70 80 50 60	Core has minimal fractures, Elevated Hematite staining on fractures	Calcite restricted to minor fracture coating							

HOLE NUMBER SL-D400-00 PAGE 2 OF

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		0 DOZER Fine grained rhyolite flow continues. Auto brecciated flow	50 60 70 80 90 100 110 120			63 Argillization bleaches core Pale whitish grey Pyrite at < 1% 101 ½" calcite vein 90 Hematite traces in auto bxa matrix and some clast (<.5%)							

HOLE NUMBER SL-D401-00 PAGE 3 OF 9

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		0 DOZER Fine grained rhyolite flow continues.	120 130 140 150 160 170 180 190			135 Hematite stained clast increase and matrix staining Pyrite content Decreased							

HOLE NUMBER SL-D400-00 PAGE 4 OF

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
Td		0-218 DOZER Fine grained rhyolite continues, weak argillization has over print hematitic alteration. Weak level chloritic/propylitic alteration produces pale greenish gray. Contact with intrusive is not altered	190 200 210			Calcite on micro fracture and low level <1% pyrite.							
BMP		218-240.5 BMP TYPE PORPHYRY Pale greenish gray porphyry with calcite replacing Sanadine crystals. Small glomerophyric feldspar clusters replaced by calcite. Smaller phenocrystals are replaced by chlorite.	220 230	60 50 60 30 40 50	218 contact at 50° tca and slightly irregular	225 white clay on fracture 234- 238-240.5 Argillization increases up to contact							
71		240.5-382.4 DOZER Rhyolite flow continues. Calcite and white clay veins and fracture coating	240 250 260	50 50 30 40 50	240.5 Autobreccia texture continues. Matrix of Autobxo increase and is darker green than surrounding clast	263.5 Calcite veins 50° tca							

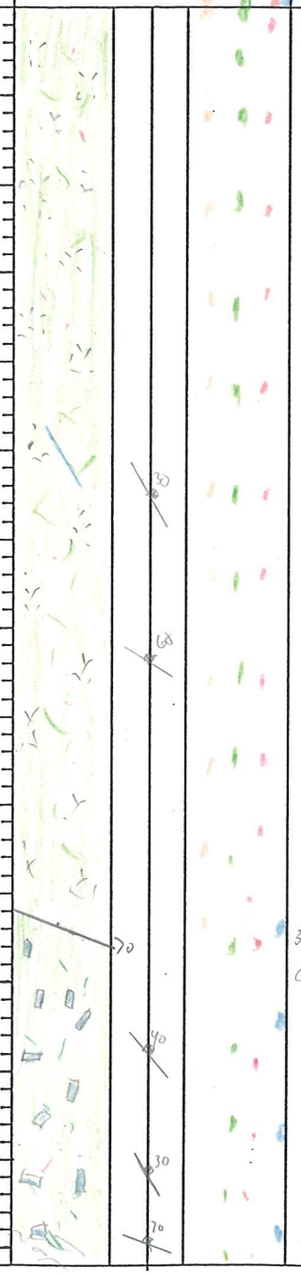
HOLE NUMBER SL-0400-0 PAGE 5 OF

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		240.5 - 382.4 DOZER Autobrecciated rhyolite flow continues Argillization around fracture zone begins at 268 280.7 - 283 white clay and qtz stock work 40° tca fracture pattern marcasite blades in white clay calcopyrite also present with pyrite 289.2 - 292 white clay, qtz veins with pyrite marcasite crystals 292 - 294.6 Argillized Dozer white clay veinlets with py and marcasite 30° tca 294.6 - 298 2 white clay veins up to 1/4" thick 298 - 300.8 Highly argillized Dozer with heavy white clay in rubble. Marcasite bladdes. 40° tca fracture in fault zone 300.8 - 303 white clay FY with py/marcasite 303 - 308 Pyrite/marcasite veinlets 308 - 313 open space with pyrite marcasite	260 270 280 290 300 310 320 330	50 50 40 40 30 70 40 50 40	271 weak crackle with pyrite matrix 285 - 286 fracture zone with white clay coating 289.2 - 303 fractured fault zone main broken zone 298.7 - 300.8 303.8 Auto breccia texture decreases	270 marcasite/pyrite veins 282.7 qtz vein with marcasite/pyrite. 30° tca 308 - 313 Druzy qtz and sulfide veins

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
268	273					
273	278					
278	280.7					
280.7	283					
283	289.2					
289.2	292					
292	294.6					
294.6	298					
298	300.8					
300.8	303					
303	308					
308	313					
313	318					

HOLE NUMBER SL-D400-00 PAGE 6 OF

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		240.5 - 382.4 DOZER Fine grained rhyolite flow continues Pale green gray color. Traces of argillization and propyllitic alteration Fractures contain dark green alteration (chlorite)	330 340 350 360 370 380										
		382.4 - 402 BMP TYPE PORPHYRY Fine grained matrix. Calcite replaced sanidines. Fine grained porphyritic clusters of replace feldspar and sanidine Lower contact is argillized and weakly sheared at 40° tca Contact was lost During drilling	390 400		382.4 70° tca Contact								

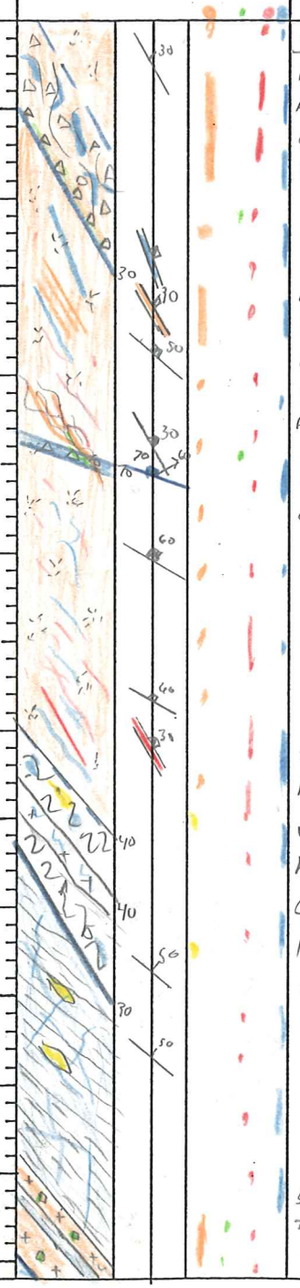
HOLE NUMBER SC-D400-00 PAGE 7 OF

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		382.4 -401 BMP TYPE PORPHYRY 401 DOZER Ryholite Flow contains Pale gray white weakly argillized	400 410 420		401 Ar 416.5- 418 Fracture	401 Argillic alteration becomes stronger than propillitic 413 pyrite is the dominate sulfide 416.5-418 slight Argillization increase Pyrite and calcite on the fractures 418-423 Argillization Increase 423- calcite increase Dozer RX
		427.5-439.2 BMP TYPE PORPHYRY BMP TYPE PORPHYRY IN FAULT BRECCIA with Dozer clast High expanded and rotated in volcanic clay matrix 427.5-439.2 Breccia In this interval are matrix supported in volcanic clay. Extreme expansion and rotation mudflow? Intrusive? Calcite floods the matrix at 428 439.2-441 Highly Sheared DOZER IN FAULT 441-442.6 Highly Sheared ALS IN FAULT	430		427.5-430.8 Breccia zone Contact 40° tca, with waxy Clay on surface oblique slip of 100° to. Fracture dip axis, matrix supported 432.4-433.3 300° tca breccia surface with 80° tca fractured surface that look depositional 434.5-450 Fault Zone Breccia consist of two types Matrix supported From 434.5-439 to highly sheared clast supported From 439-450	427.5-430.8 moderate argillization of breccia matrix clast of calcite in breccia 430.8-438 Argillization become variable with maximum moderate level. 438-450 moderate To Heavy argillization Dozer breccia is highly argillized 423-434.5 Pyrite replaces some phenocryst in Bmp
		442.6 -512.7 DOZER 434.3-441 clays have a faint green tint, marcasite Blades is Present in the breccia matrix of <1% 441-442.6 ALS has any syngenetic Pyrite present. This Dozer contains a planar foliation 434.5-438 Traces of silicification of the clay matrix.	450 460 470		441 Contact between Brecciated Dozer and brecciated ALS surface is rough 700° tca low contact is 50° tca 465 Pyrite and calcite veinlets increase 472.5-479.6 Fault/Fracture zone mixed of crackle RX and fractures	446.2-450 Argillized Dozer with pyrite vein fragments and agglomeration 450-453 Calcite and Pyrite veinlets 50° tca 458-463 1" Calcite Veins

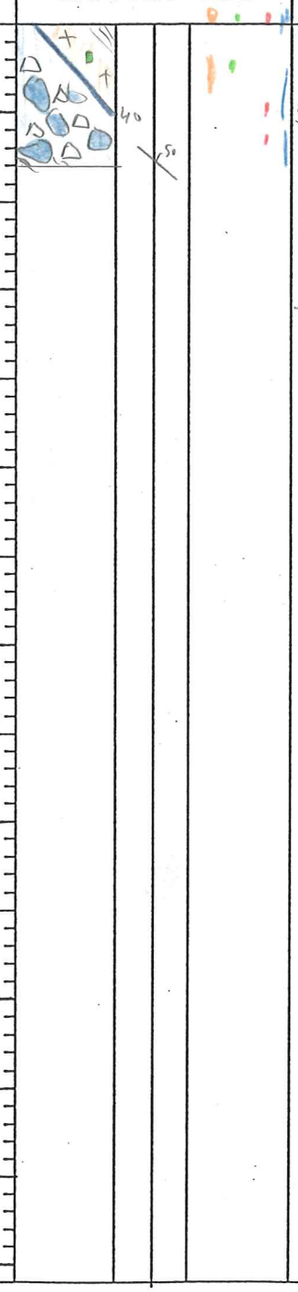
ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
413	418					
418	423					
423	427.5		.013			
427.5	430.8		.177			
430.8	432.4		.003			
432.4	433.3		.036			
433.3	434.5					
434.5	438					
438	439.2					
439.2	441					
441	442.6					
442.6	446.2					
446.2	450					
450	453					
453	458					
458	463					
463	468					
468	472.5					

HOLE NUMBER SL-D400-00 PAGE 8 OF

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		442.6 - 512.7 DOZER Fine grained rhyolite flow continues. 493 Faint green tinted clay on fracture	470 480 490 500 510		472.5 - 479.6 Breccia/Fracture zone footwall surface from 479-478.6 has highest intensity shearing 491-499 Fracture zone with calcite and white clay veins. Minor brecciation from 491 to 491.3 504.1 - 504.6 Calcite in shear 512.7 - 520.3 Brecciated ALS with Intrusive/Tuff boulder 516-517.5 Calcite and qtz lenses are sheared along foliation 538.5 very sharp intrusive contact 40° tc	Sulfide found as Pyrite cubes and veinlets. only traces of marcasite present 479.6 green waxy clay on shear plane 504.1-504.6 Pink calcite in weak shear zone	468	472.5					
							472.5	474.9					
							474.9	479.6					
							479.6	483					
							483	488					
							488	493					
							493	498					
							498	503					
							503	508					
		512.7 - 540 ALS Black phillitic shale with interbedded siltstone laminae. Metamorphic qtz boudens 516-517.5 Fine grained gray intrusive. No Phenocryst apparent is this the tuff of the North zone 537-542 Fine grained mafic intrusive Faint green stain to phenocryst. Foliation of phenocryst. ½" inclusion of shale	520 530 540				508	512.7					
							512.7	516					
							516	517.5					
							517.5	520.3					
							520.3	528					
							528	533					
							533	537					
							537	542					

HOLE NUMBER SL-D400-00 PAGE 9 OF 9

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
ALS.	P	512.7-548 ALS. Phillitic shale contin ue	540 550		542-544 Highly sheared shale with clast of intrusive 544-548 Bedding breccia	

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
537.	542					
542	544					
544	548					

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SLD-400-00 DATE: May 9, 00 LOGGED BY: LASSITER/DGM PAGE 1 OF 10

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	8	50	50	50										
8	13	100	106	98										
13	18	100	100	94										
18	23	100	102	90										
23	28	100	100	100										
28	33	100	102	100										
33	38	100	100	92										
38	43	100	104	72										
43	48	100	98	86										
48	53	100	100	86										
53	58	100	100	78										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SLD-400-B.0 DATE: May 9, 00 LOGGED BY: LASSITER/DGM PAGE 2 OF 10

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)
58	63	100	98	100										
63	68	100	96	92										
68	73	100	106	100										
73	78	100	106	100										
78	83	100	100	100										
83	88	100	102	100										
88	93	100	100	100										
93	98	100	102	100										
98	103	100	100	88										
103	108	100	100	100										
108	113	100	102	78										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SLD-400-00 DATE: May 9 00 LOGGED BY: LASSITER/DGL PAGE 3 OF 10

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)
113	123	100	100	100										
123	128	100	100	100										
128	133	100	102	100										
133	138	100	100	84										
138	143	100	100	82										
143	148	100	98	100										
148	153	100	104	88										
153	158	100	100	100										
158	163	100	100	100										
163	168	100	100	100										
168	173	100	100	100										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SLD-400-00 DATE: May 9 00 LOGGED BY: LASSITER/DGA PAGE 4 OF 10

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)
173	178	100	100	100										
178	183	100	100	88										
183	188	100	100	100										
188	193	100	100	100										
193	198	100	98	100										
198	203	100	100	100										
203	208	100	100	100										
208	213	100	100	100										
213	218	100	100	100										
218	223	100	88	68										
223	228	100	106	58										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SL-D400-00 DATE: 5-10-00 LOGGED BY: D.G. MacMorran PAGE 5 OF 10

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)
228	233	99	102	54										
233	238	100	102	40										
238	243	88	100	40										
243	248	100	102	98										
248	253	100	100	84										
253	258	100	100	72										
258	263	100	98	100										
263	268	100	100	92										
268	273	100	100	94										
273	278	100	102	92										
278	283	100	98	98										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SL-D400-00 DATE: 5-10-00 LOGGED BY: D.G. Mackerrow PAGE 6 OF 10

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)
283	288	100	100	92										
288	293	90	100	56										
293	298	100	100	84										
298	303	60	100	FLT 48										
303	308	100	96	74										
308	313	88	100	90										
313	318	100	102	94										
318	323	100	100	88										
323	328	100	96	84										
328	333	100	102	100										
333	338	100	102	100										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # S1-D400-00 DATE: 5-10-00 LOGGED BY: D.G. MacKerron PAGE 7 OF 10

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)
338	343	100	102	100										
343	348	100	100	98										
348	353	100	102	100										
353	358	100	100	100										
358	363	90	100	76										
363	368	100	100	80										
368	373	100	100	56										
373	378	100	104	100										
378	383	100	100	100										
383	388	100	100	100										
388	393	100	98	92										
393	398	88	100	66										
398	403	100	100	80										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SL-D400-00 DATE: 4-11-00 LOGGED BY: D.G. Mackenzie PAGE 8 OF 10

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)
403	408	100	100	90										
408	413	100	100	86										
413	418	100	102	96										
418	423	100	100	80										
423	428	100	100	88										
428	433	98	100	Bxo 52										
433	438	92	102	Bxo 81										
438	443	78	100	Bxo 0										
443	448	100	102	Bxo 0										
448	453	76	100	22										
453	458	92	104	86										
458	463	100	100	74										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SL-17400-00 DATE: 4-11-00 LOGGED BY: D.G. MacKerron PAGE 9 OF 10

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)
463	468	92	100	82										
468	473	98	98	80										
473	478	97	100	26										
478	483	98	104	26										
483	488	86	102	36										
488	493	99	102	60										
493	498	76	100	18										
498	503	96	100	88										
503	508	100	100	94										
508	513	96	98	44										
513	518	58	100	8										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # SL-D400-00 DATE: 4-11-00 LOGGED BY: D.G. MacKarrow PAGE 10 OF 10

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)
518	523	88	100	0										
523	528	72	100	14										
528	533	44	100	20										
533	538	14	88	0										
538	542	15	70	0										
542	544	0	105	0										
544	548	98	102	0										

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

(775) 356-0606

INVOICE NO: SP 0057429-IN
INVOICE DATE: 05/26/00

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
SL-D400-00	KURT ALLEN	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
14	SAMPLES RECEIVED	.00	.00
1	NO PREPARATION REQUIRED	.00	.00
13	DRY/JAW CRUSH ENTIRE SAMPLE	2.30	29.90
13	COARSE MILLING CHARGE	6.00	78.00
13	ROTARY SPLIT	2.40	31.20
13	RING/PUCK MILL	2.00	26.00
14	Au (1 A.T. FIRE ASSAY)	8.00	112.00
14	HYDROCHLORIC/NITRIC DIGESTION	2.00	28.00
14	Ag ANALYSES	1.00	14.00

86-3010-477
KAA

NET INVOICE:	319.10
LESS DISCOUNT:	95.73
FREIGHT:	.00
INVOICE TOTAL:	223.37

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057429

American Assay Laboratories

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS

: KURT ALLEN

:

:

CLIENT REFERENCE No: SL-D400-00 RECEIVED : 15 MAY 2000

No. SAMPLES : 14 REPORTED : 24 MAY 2000

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

ANALYSIS REPORT SP057429

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SL-D400-00

REPORTED : 24 MAY 2000

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
SL-D400-00 268-273	0.004		0.05
SL-D400-00 273-278	0.001		0.03
SL-D400-00 278.0-280.7	0.003		0.04
SL-D400-00 280.7-283.0	0.010	0.009	0.07
SL-D400-00 283.0-289.2	0.002		0.03
SL-D400-00 289.2-292.0	0.003		0.05
SL-D400-00 292.0-294.6	0.004	0.004	0.06
SL-D400-00 294.6-298.0	0.001		0.04
SL-D400-00 298.0-300.8	0.004		0.05
SL-D400-00 300.8-303.0	0.001		0.04
SL-D400-00 303-308	0.001		0.03
SL-D400-00 308-313	0.002		0.04
SL-D400-00 313-318	0.001		0.04
34777	0.171		1.81

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057429

American Assay Laboratories

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS
: KURT ALLEN
:
:

CLIENT REFERENCE No: SL-D400-00 RECEIVED : 15 MAY 2000

No. SAMPLES : 14 REPORTED : 24 MAY 2000

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

P6-3010-477

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057429

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SL-D400-00

REPORTED : 24 MAY 2000

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
SL-D400-00 268-273	0.004		0.05
SL-D400-00 273-278	0.001		0.03
SL-D400-00 278.0-280.7	0.003		0.04
SL-D400-00 280.7-283.0	0.010	0.009	0.07
SL-D400-00 283.0-289.2	0.002		0.03
SL-D400-00 289.2-292.0	0.003		0.05
SL-D400-00 292.0-294.6	0.004	0.004	0.06
SL-D400-00 294.6-298.0	0.001		0.04
SL-D400-00 298.0-300.8	0.004		0.05
SL-D400-00 300.8-303.0	0.001		0.04
SL-D400-00 303-308	0.001		0.03
SL-D400-00 308-313	0.002		0.04
SL-D400-00 313-318	0.001		0.04
34777	0.171		1.81

86-306-477

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057429

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS

: KURT ALLEN

:

:

CLIENT REFERENCE No: SL-D400-00 RECEIVED : 15 MAY 2000

No. SAMPLES : 14 REPORTED : 24 MAY 2000

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 SP057429

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SL-D400-00

REPORTED : 24 MAY 2000

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
SL-D400-00 268-273	0.004		0.05
SL-D400-00 273-278	0.001		0.03
SL-D400-00 278.0-280.7	0.003		0.04
SL-D400-00 280.7-283.0	0.010	0.009	0.07
SL-D400-00 283.0-289.2	0.002		0.03
SL-D400-00 289.2-292.0	0.003		0.05
SL-D400-00 292.0-294.6	0.004	0.004	0.06
SL-D400-00 294.6-298.0	0.001		0.04
SL-D400-00 298.0-300.8	0.004		0.05
SL-D400-00 300.8-303.0	0.001		0.04
SL-D400-00 303-308	0.001		0.03
SL-D400-00 308-313	0.002		0.04
SL-D400-00 313-318	0.001		0.04
34777	0.171		1.81

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057429

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS
: KURT ALLEN
:
:

CLIENT REFERENCE No: SL-D400-00 RECEIVED : 15 MAY 2000

No. SAMPLES : 14 REPORTED : 22 MAY 2000

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.

05/22/2000 12:49 7753561413 AMERICAN ASSAY LABS PAGE 01
7753561413

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057429

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SL-D400-00

REPORTED : 22 MAY 2000

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
SL-D400-00 268-273	0.004		
SL-D400-00 273-278	0.001		
SL-D400-00 278.0-280.7	0.003		
SL-D400-00 280.7-283.0	0.010	0.009	
SL-D400-00 283.0-289.2	0.002		
SL-D400-00 289.2-292.0	0.003		
SL-D400-00 292.0-294.6	0.004	0.004	
SL-D400-00 294.6-298.0	0.001		
SL-D400-00 298.0-300.8	0.004		
SL-D400-00 300.8-303.0	0.001		
SL-D400-00 303-308	0.001		
SL-D400-00 308-313	0.002		
SL-D400-00 313-318	0.001		
34777	0.171		

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057013

American Assay Laboratories

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS

: KURT ALLEN

:

:

CLIENT REFERENCE No: SLD-400-00 RECEIVED : 14 APR 2000

No. SAMPLES : 37 REPORTED : 25 APR 2000

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

ANALYSIS REPORT SP057013

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 25 APR 2000

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
SLD-400-00 413-418	<0.001		<0.02
SLD-400-00 418-423	0.001		<0.02
SLD-400-00 423.0-427.5	0.013		0.02
SLD-400-00 427.5-430.8	0.177		0.22
SLD-400-00 430.8-432.4	0.003		0.39
SLD-400-00 432.4-433.3	0.036		0.08
SLD-400-00 433.3-434.5	0.002		0.05
SLD-400-00 434.5-438.0	0.001		0.04
SLD-400-00 438.0-439.2	0.006		0.02
SLD-400-00 439.2-441.0	0.002		0.03
SLD-400-00 441.0-442.6	0.002		<0.02
SLD-400-00 442.6-446.2	0.001		0.06
SLD-400-00 446.2-450.0	0.001		<0.02
SLD-400-00 450-453	0.002		0.02
SLD-400-00 453-458	0.001		<0.02
SLD-400-00 458-463	0.002		<0.02
SLD-400-00 463-468	0.002		0.02
SLD-400-00 468.0-472.5	0.001		0.02
SLD-400-00 472.5-474.9	0.001		<0.02
SLD-400-00 474.9-479.6	0.001		0.02
SLD-400-00 479.6-483.0	0.001		<0.02
SLD-400-00 483-488	0.001		<0.02
SLD-400-00 488-493	0.001		0.02
SLD-400-00 493-498	0.001		0.02
SLD-400-00 498-503	0.001		0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057013

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 25 APR 2000

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
SLD-400-00 503-508	0.002		0.02
SLD-400-00 508.0-512.7	0.001		0.03
SLD-400-00 512.7-516.0	<0.001		0.09
SLD-400-00 516.0-517.5	<0.001		<0.02
SLD-400-00 517.5-520.3	<0.001		0.05
SLD-400-00 520.3-528.0	<0.001		0.10
SLD-400-00 528-533	<0.001		0.04
SLD-400-00 533-537	<0.001		0.02
SLD-400-00 537-542	<0.001		<0.02
SLD-400-00 542-544	<0.001		<0.02
SLD-400-00 544-548	<0.001		0.02
89655	0.148		1.58

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057013

American Assay Laboratories

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS

: KURT ALLEN

:

:

CLIENT REFERENCE No: SLD-400-00 RECEIVED : 14 APR 2000

No. SAMPLES : 37 REPORTED : 25 APR 2000

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

ANALYSIS REPORT SP057013

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 25 APR 2000

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
SLD-400-00 413-418	<0.001		<0.02
SLD-400-00 418-423	0.001		<0.02
SLD-400-00 423.0-427.5	0.013		0.02
SLD-400-00 427.5-430.8	0.177		0.22
SLD-400-00 430.8-432.4	0.003		0.39
SLD-400-00 432.4-433.3	0.036		0.08
SLD-400-00 433.3-434.5	0.002		0.05
SLD-400-00 434.5-438.0	0.001		0.04
SLD-400-00 438.0-439.2	0.006		0.02
SLD-400-00 439.2-441.0	0.002		0.03
SLD-400-00 441.0-442.6	0.002		<0.02
SLD-400-00 442.6-446.2	0.001		0.06
SLD-400-00 446.2-450.0	0.001		<0.02
SLD-400-00 450-453	0.002		0.02
SLD-400-00 453-458	0.001		<0.02
SLD-400-00 458-463	0.002		<0.02
SLD-400-00 463-468	0.002		0.02
SLD-400-00 468.0-472.5	0.001		0.02
SLD-400-00 472.5-474.9	0.001		<0.02
SLD-400-00 474.9-479.6	0.001		0.02
SLD-400-00 479.6-483.0	0.001		<0.02
SLD-400-00 483-488	0.001		<0.02
SLD-400-00 488-493	0.001		0.02
SLD-400-00 493-498	0.001		0.02
SLD-400-00 498-503	0.001		0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP057013

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 25 APR 2000

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag(OZ) D210 OPT
SLD-400-00 503-508	0.002		0.02
SLD-400-00 508.0-512.7	0.001		0.03
SLD-400-00 512.7-516.0	<0.001		0.09
SLD-400-00 516.0-517.5	<0.001		<0.02
SLD-400-00 517.5-520.3	<0.001		0.05
SLD-400-00 520.3-528.0	<0.001		0.10
SLD-400-00 528-533	<0.001		0.04
SLD-400-00 533-537	<0.001		0.02
SLD-400-00 537-542	<0.001		<0.02
SLD-400-00 542-544	<0.001		<0.02
SLD-400-00 544-548	<0.001		0.02
89655	0.148		1.58

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

(775) 356-0606

INVOICE NO: SP 0057013-IN
INVOICE DATE: 05/02/00

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
SLD-400-00	KURT ALLEN	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
37	SAMPLES RECEIVED	.00	.00
1	NO PREPARATION REQUIRED	.00	.00
36	DRY/JAW CRUSH ENTIRE SAMPLE	4.60	165.60
36	COARSE MILLING CHARGE	10.00	360.00
36	ROTARY SPLIT	3.60	129.60
36	RING/PUCK MILL	2.00	72.00
37	Au (1 A.T. FIRE ASSAY)	8.00	296.00
37	HYDROCHLORIC/NITRIC DIGESTION	2.00	74.00
37	Ag ANALYSES	1.00	37.00

86-3010-477
CA

NET INVOICE:	1,134.20
LESS DISCOUNT:	340.26
FREIGHT:	.00
INVOICE TOTAL:	793.94

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057013

PO BOX 11330
RENO NV,USA
Ph.(775) 356-0606, Fax.(775) 356-1413

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS

: KURT ALLEN

:

:

CLIENT REFERENCE No: SLD-400-00 RECEIVED : 14 APR 2000

No. SAMPLES : 37 REPORTED : 25 APR 2000

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.

04/25/2000 13:40 7753561413 AMERICAN ASSAY LABS PAGE 01
7753561413

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057013

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 25 APR 2000

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
SLD-400-00 413-418	<0.001		<0.02
SLD-400-00 418-423	0.001		<0.02
SLD-400-00 423.0-427.5	0.013		0.02
SLD-400-00 427.5-430.8	0.177		0.22
SLD-400-00 430.8-432.4	0.003		0.39
SLD-400-00 432.4-433.3	0.036		0.08
SLD-400-00 433.3-434.5	0.002		0.05
SLD-400-00 434.5-438.0	0.001		0.04
SLD-400-00 438.0-439.2	0.006		0.02
SLD-400-00 439.2-441.0	0.002		0.03
SLD-400-00 441.0-442.6	0.002		<0.02
SLD-400-00 442.6-446.2	0.001		0.06
SLD-400-00 446.2-450.0	0.001		<0.02
SLD-400-00 450-453	0.002		0.02
SLD-400-00 453-458	0.001		<0.02
SLD-400-00 458-463	0.002		<0.02
SLD-400-00 463-468	0.002		0.02
SLD-400-00 468.0-472.5	0.001		0.02
SLD-400-00 472.5-474.9	0.001		<0.02
SLD-400-00 474.9-479.6	0.001		0.02
SLD-400-00 479.6-483.0	0.001		<0.02
SLD-400-00 483-488	0.001		<0.02
SLD-400-00 488-493	0.001		0.02
SLD-400-00 493-498	0.001		0.02
SLD-400-00 498-503	0.001		0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057013

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 25 APR 2000

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
SLD-400-00 503-508	0.002		0.02
SLD-400-00 508.0-512.7	0.001		0.03
SLD-400-00 512.7-516.0	<0.001		0.09
SLD-400-00 516.0-517.5	<0.001		<0.02
SLD-400-00 517.5-520.3	<0.001		0.05
SLD-400-00 520.3-528.0	<0.001		0.10
SLD-400-00 528-533	<0.001		0.04
SLD-400-00 533-537	<0.001		0.02
SLD-400-00 537-542	<0.001		<0.02
SLD-400-00 542-544	<0.001		<0.02
SLD-400-00 544-548	<0.001		0.02
89655	0.148		1.58

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057013

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

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS

: KURT ALLEN

:

:

CLIENT REFERENCE No: SLD-400-00 RECEIVED : 14 APR 2000

No. SAMPLES : 37 REPORTED : 23 APR 2000

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 SP057013

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 23 APR 2000

SAMPLES		Au(OZ)	Au(RZ)	Ag(OZ)
SLD-400-00	413-418	<0.001		
SLD-400-00	418-423	0.001		
SLD-400-00	423.0-427.5	0.013		
SLD-400-00	427.5-430.8	0.177		
SLD-400-00	430.8-432.4	0.003		
SLD-400-00	432.4-433.3	0.036		
SLD-400-00	433.3-434.5	0.002		
SLD-400-00	434.5-438.0	0.001		
SLD-400-00	438.0-439.2	0.006		
SLD-400-00	439.2-441.0	0.002		
SLD-400-00	441.0-442.6	0.002		
SLD-400-00	442.6-446.2	0.001		
SLD-400-00	446.2-450.0	0.001		
SLD-400-00	450-453	0.002		
SLD-400-00	453-458	0.001		
SLD-400-00	458-463	0.002		
SLD-400-00	463-468	0.002		
SLD-400-00	468.0-472.5	0.001		
SLD-400-00	472.5-474.9	0.001		
SLD-400-00	474.9-479.6	0.001		
SLD-400-00	479.6-483.0	0.001		
SLD-400-00	483-488	0.001		
SLD-400-00	488-493	0.001		
SLD-400-00	493-498	0.001		
SLD-400-00	498-503	0.001		

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP057013

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : SLD-400-00

REPORTED : 23 APR 2000

SAMPLES	Au(OZ)	Au(RZ)	Ag(OZ)
SLD-400-00 503-508	0.002		
SLD-400-00 508.0-512.7	0.001		
SLD-400-00 512.7-516.0	<0.001		
SLD-400-00 516.0-517.5	<0.001		
SLD-400-00 517.5-520.3	<0.001		
SLD-400-00 520.3-528.0	<0.001		
SLD-400-00 528-533	<0.001		
SLD-400-00 533-537	<0.001		
SLD-400-00 537-542	<0.001		
SLD-400-00 542-544	<0.001		
SLD-400-00 544-548	<0.001		
89655	0.148		

Drill hole # SL-D400-00

Down hole depth	Quadrant:	Measured Bearing	Corrected Azimuth	Measured Inclination	Corrected Dip
52	NE	74.5	90.12	41.2	-48.8
253	NE	75.5	91.12	40.5	-49.5
453	NE	76	91.62	40	-50

152.5

353

TD Depth 548

2000 Declination 15.62

3987.7

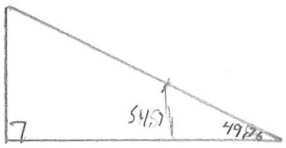
54.7

1575

3933.

3918 Td elev

417



353

528

548

.5

SAMPLE SUBMITTAL FORM

American Assay Laboratories Inc.

Sparks Office
1500 Glendale Ave.
Nevada 89431
Box 71060
Reno, NV. 89570
Telephone
(702) 356-0606
Fax
(702) 356-1413

Elko Office
2320 Last Chance Rd.
Nevada 89801
Box 2908
Elko, NV. 89801
Telephone
(702) 738-9100
Fax
(702) 738-2594

Company: Rosebud Mining L.L.C.

Address: P.O. Box 2610 Winnemucca, NV 89446

Telephone Number: (775) 623-6912 Fax Number: (775) 623-6967

Project Name: _____ Purchase Order Number: _____

Transport Company: _____ Waybill Number: _____

Date Shipped: 05-13-00 Number of Packages: 13 [ ] Prepaid [ ] Collect

ANALYSIS REQUIRED

SAMPLE	TYPE	ELEMENTS REQUIRED
SL-D400-CO	Core	Au Ag: Use Rosebud Mine Development Protocol
(See attached sheet for sample intervals)		
1 Rosebud Production Standards at end of run	Pulp	

COARSE REJECTS (Normally Discarded)

[ ] Return COD after analysis complete
[X] By prior arrangements

PULPS (Normally Stored Free For One Month)

[ ] Discard after one month
[ ] Return COD after one month
[X] By prior arrangements

RESULTS AND INVOICES TO BE SENT TO:

Please mark invoice person and address [I]

(1) Kurt Allen (See above)

(2) _____

(3) _____

Comments:

CLIENT FILE COPY

SL-D400-00

Depth From	To	Interval	Au	Ag	Sample Number
268	273	5	x	x	1
273	278	5	x	x	2
278	280.7	2.7	x	x	3
280.7	283	2.3	x	x	4
283	289.2	6.2	x	x	5
289.2	292	2.8	x	x	6
292	294.6	2.6	x	x	7
294.6	298	3.4	x	x	8
298	300.8	2.8	x	x	9
300.8	303	2.2	x	x	10
303	308	5	x	x	11
308	313	5	x	x	12
313	318	5	x	x	13

SL-D400-00

Depth From	To	Interval	Au	Ag	Sample Number
413	418	5	x	x	1
418	423	5	x	x	2
423	427.5	4.5	x	x	3
427.5	430.8	3.3	x	x	4
430.8	432.4	1.6	x	x	5
432.4	433.3	0.9	x	x	6
433.3	434.5	1.2	x	x	7
434.5	438	3.5	x	x	8
438	439.2	1.2	x	x	9
439.2	441	1.8	x	x	10
441	442.6	1.6	x	x	11
442.6	446.2	3.6	x	x	12
446.2	450	3.8	x	x	13
450	453	3	x	x	14
453	458	5	x	x	15
458	463	5	x	x	16
463	468	5	x	x	17
468	472.5	4.5	x	x	18
472.5	474.9	2.4	x	x	19
474.9	479.6	4.7	x	x	20
479.6	483	3.4	x	x	21
483	488	5	x	x	22
488	493	5	x	x	23
493	498	5	x	x	24
498	503	5	x	x	25
503	508	5	x	x	26
508	512.7	4.7	x	x	27
512.7	516	3.3	x	x	28
516	517.5	1.5	x	x	29
517.5	520.3	2.8	x	x	30
520.3	528	7.7	x	x	31
528	533	5	x	x	32
533	537	4	x	x	33
537	542	5	x	x	34
542	544	2	x	x	35
544	548	4	x	x	36

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, LLC

Address: PO Box 2610

City Winnemucca State Nv Zip 89446

Telephone Number: (775) 623-6912 Fax Number: (775) 623-6967

Project Name: _____ Purchase Order Number: _____

Date Submitted: 4-12-00 Number of Samples: 36

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

SAMPLE IDENTIFICATION	TYPE	ELEMENTS REQUIRED
SLD 400-00	Core	Au Ag; use Rosebud Mine development protocal
See attached sheet for sample intervals		
1 Rosebud Production Standard at end of Run	Pulp	

COARSE REJECTS (Normally Discarded After 60 Days)

[X] Return COD after analysis complete

PULPS (Normally Stored Free For One Month)

[ ] Discard after one month

[X] Return COD after one month

RESULTS AND INVOICES TO BE SENT TO:

Invoice to:

Kurt Allen

Results to:

Kurt Allen

Comments:

CLIENT FILE COPY

TARGET	Drill Hole	Dip	Azimuth
	400	-51	87

CUMULATIVE DEVIATION				CUMULATIVE LOCATION			
NO.	DEPTH ft.	NORTHING ft.	EASTING ft.	NO.	ELEV. ft.	NORTHING ft.	EASTING ft.
1	0.78	0.03	0.63	0	4334.22	2204855.03	481254.63
2	16.32	0.69	13.20	20	4318.68	2204855.69	481267.20
3	31.86	1.35	25.77	40	4303.14	2204856.35	481279.77
4	47.41	2.01	38.34	60	4287.59	2204857.01	481292.34
5	62.95	2.67	50.90	80	4272.05	2204857.67	481304.90
6	78.49	3.33	63.47	100	4256.51	2204858.33	481317.47
7	94.04	3.98	76.04	120	4240.96	2204858.98	481330.04
8	109.58	4.64	88.61	140	4225.42	2204859.64	481342.61
9	125.12	5.30	101.18	160	4209.88	2204860.30	481355.18
10	140.66	5.96	113.75	180	4194.34	2204860.96	481367.75
11	156.21	6.62	126.32	200	4178.79	2204861.62	481380.32
12	171.75	7.28	138.89	220	4163.25	2204862.28	481392.89
13	187.29	7.93	151.46	240	4147.71	2204862.93	481405.46
14	202.84	8.59	164.03	260	4132.16	2204863.59	481418.03
15	218.38	9.25	176.59	280	4116.62	2204864.25	481430.59
16	233.92	9.91	189.16	300	4101.08	2204864.91	481443.16
17	249.47	10.57	201.73	320	4085.53	2204865.57	481455.73
18	265.01	11.23	214.30	340	4069.99	2204866.23	481468.30
19	280.55	11.89	226.87	360	4054.45	2204866.89	481480.87
20	296.10	12.54	239.44	380	4038.90	2204867.54	481493.44
21	311.64	13.20	252.01	400	4023.36	2204868.20	481506.01
22	327.18	13.86	264.58	420	4007.82	2204868.86	481518.58
23	342.72	14.52	277.15	440	3992.28	2204869.52	481531.15
24	358.27	15.18	289.72	460	3976.73	2204870.18	481543.72
25	373.81	15.84	302.28	480	3961.19	2204870.84	481556.28
26	389.35	16.49	314.85	500	3945.65	2204871.49	481568.85
27	404.90	17.15	327.42	520	3930.10	2204872.15	481581.42
28	420.44	17.81	339.99	540	3914.56	2204872.81	481593.99
29	435.98	18.47	352.56	560	3899.02	2204873.47	481606.56
30	451.53	19.13	365.13	580	3883.47	2204874.13	481619.13
31	467.07	19.79	377.70	600	3867.93	2204874.79	481631.70
32	482.61	20.44	390.27	620	3852.39	2204875.44	481644.27
33	498.16	21.10	402.84	640	3836.84	2204876.10	481656.84
34	513.70	21.76	415.40	660	3821.30	2204876.76	481669.40
35	529.24	22.42	427.97	680	3805.76	2204877.42	481681.97
36	544.78	23.08	440.54	700	3790.22	2204878.08	481694.54
37	560.33	23.74	453.11	720	3774.67	2204878.74	481707.11
38	575.87	24.40	465.68	740	3759.13	2204879.40	481719.68
39	591.41	25.05	478.25	760	3743.59	2204880.05	481732.25
40	606.96	25.71	490.82	780	3728.04	2204880.71	481744.82
41	622.50	26.37	503.39	800	3712.50	2204881.37	481757.39
42	638.04	27.03	515.96	820	3696.96	2204882.03	481769.96

1550
1575
1550
1575
127.8
100

SL-D 400 - 00 BOX 46
DEPTH 422. - 431.5

SL-D 400 - 00 BOX 45
DEPTH 412.5 - 422.

SL-D 400 - 00 BOX 47
DEPTH 431.5 - 440.5

453
458
450
SL-D 400 - 00 BOX 49
DEPTH 450. - 459.

442.6
443
441
446.2
44B
SL-D 400 - 00 BOX 48
DEPTH 440.5 - 450.

SL-D 400 - 00 BOX 50
DEPTH 459. - 468.

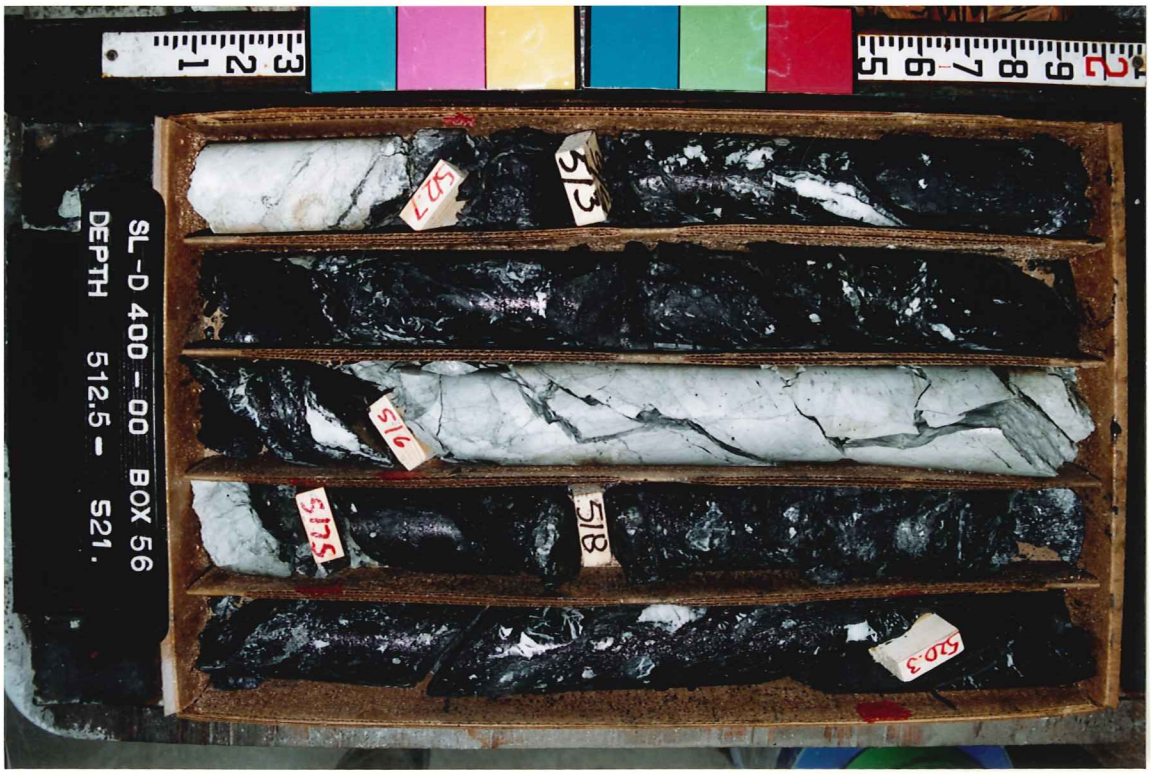
478
479.6
483
SL-D 400-00 BOX 52
DEPTH 477. - 486.

475
465
473
474.9
SL-D 400-00 BOX 51
DEPTH 468. - 477.

SL-D 400-00 BOX 53
DEPTH 486. - 494.5
493

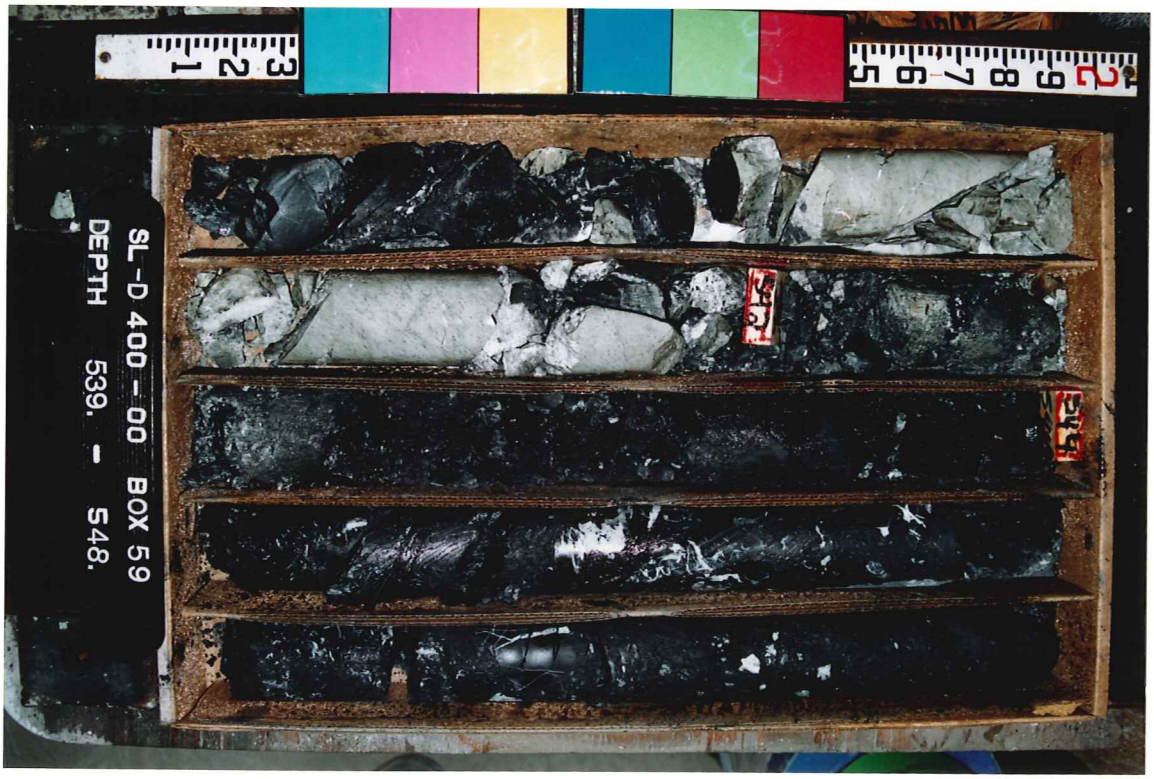
SL-D 400-00 BOX 55
DEPTH 503. - 512.5

SL-D 400-00 BOX 54
DEPTH 494.5- 503.


SL-D 400-00 BOX 56
DEPTH 512.5 - 521.

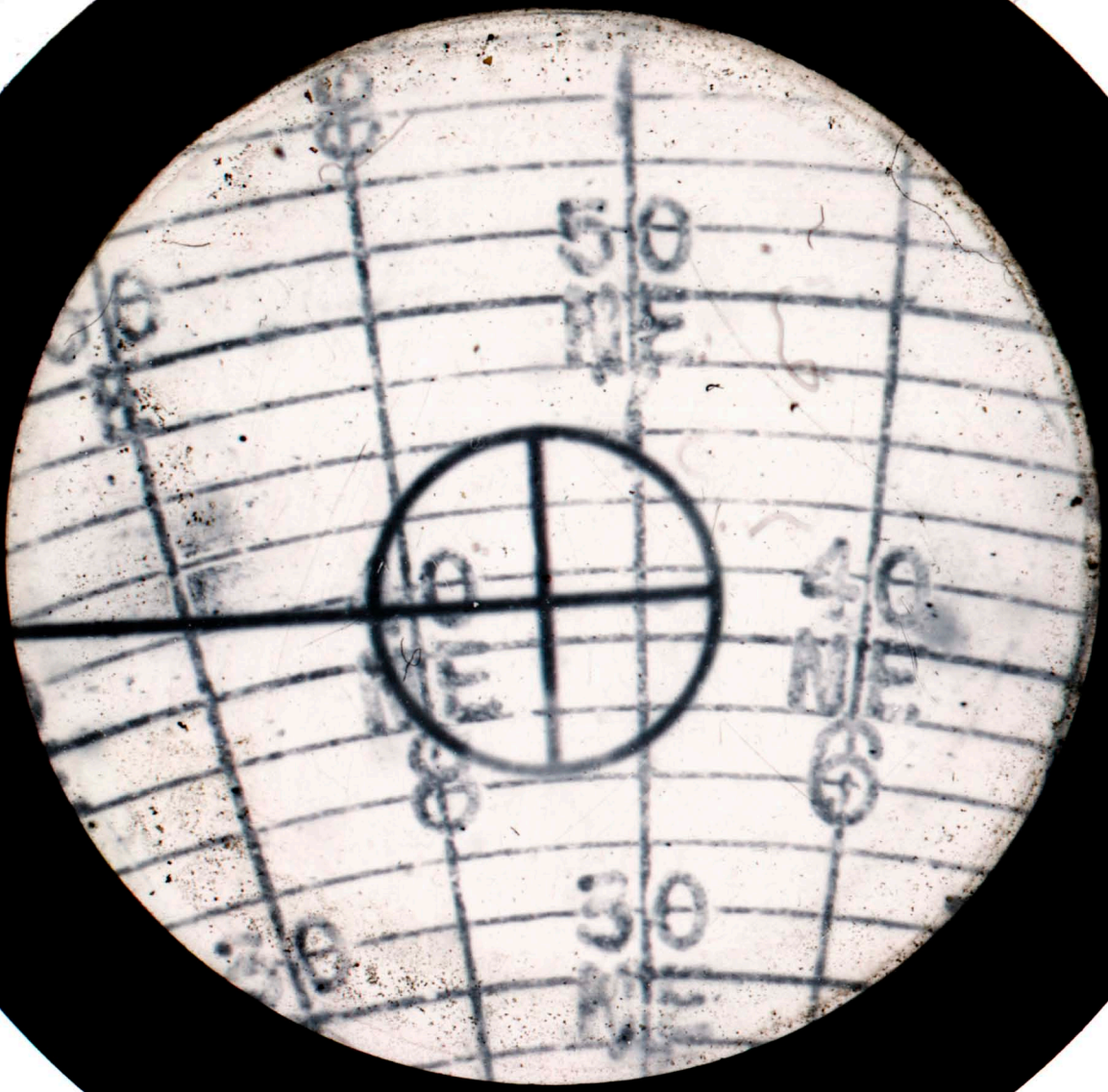
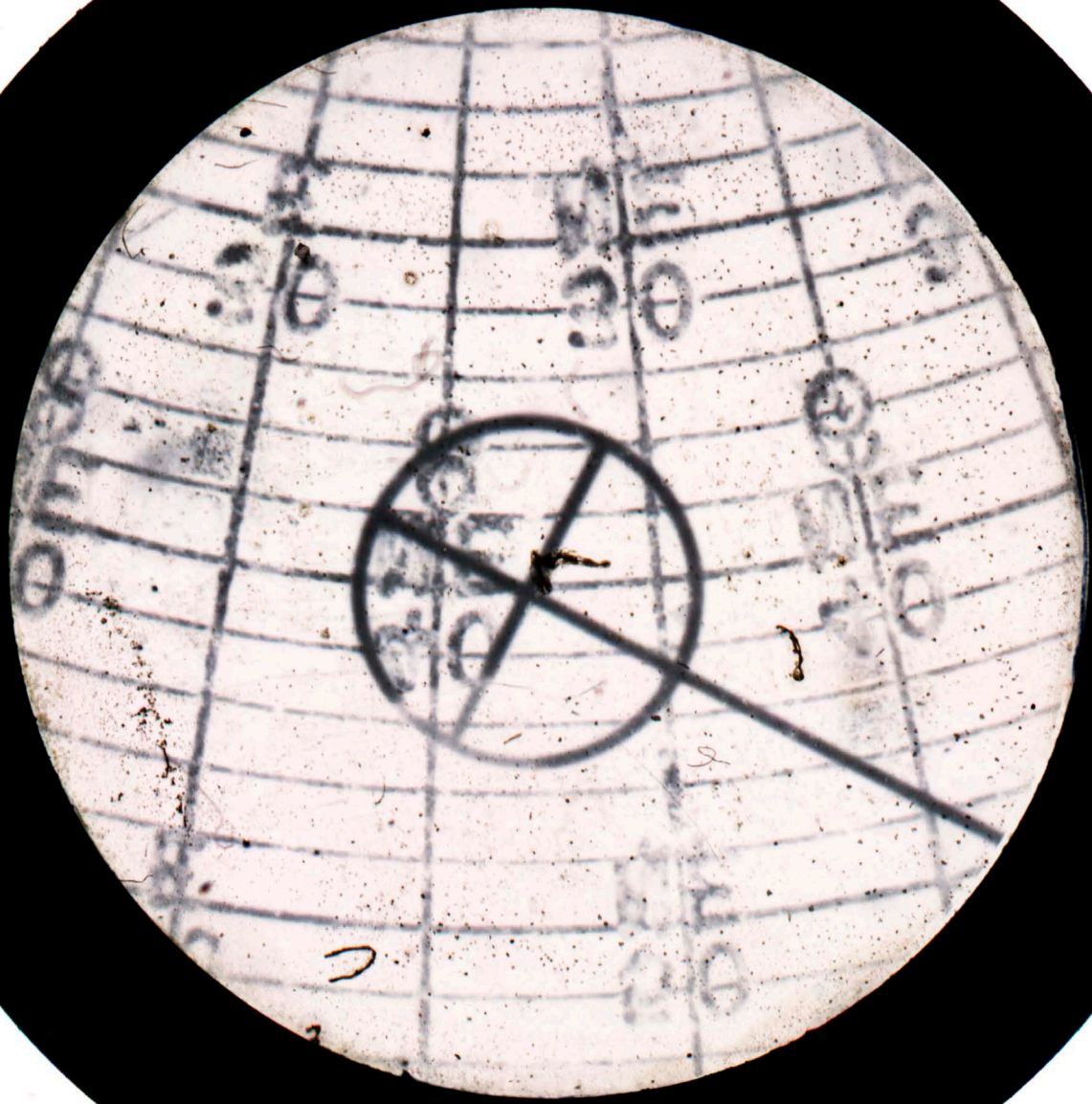
533
537
538
SL-D 400-00 BOX 58
DEPTH 530. - 539.

523
SL-D 400-00 BOX 57
DEPTH 521. - 530.


SL-D 400-00 BOX 59
DEPTH 539. - 548.

548.
SL-D 400-00 BOX 60
DEPTH . - 548. TD

50
40
30
50
40
30


50
NE
40
NE
30
NE
60
NE
80
NE
90
NE