60001217

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-317-98
AUTHOR	S. King; K. Allen; Whitney
DATE OF DOC(S)	1998
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Rosebud Mining Co. LLC Hecla Mining Co.
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; photographs; total depth 232' receipt; handwritten notes; downhole camera images 31p. 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: NB
Initials Date

Revised: 1/22/08

D-317-98

6000 1217 4010

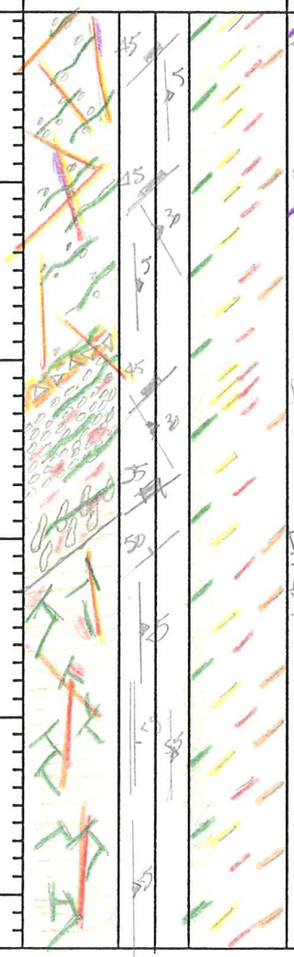
6000 1217

Hecla MINING COMPANY

- quartz, chalcedony, silicification
- faults, fractures
- FeOx
- sulfide — $BaSO_4$
- calcite, carbonate
- argillization, white clays
- propylitization
- potassic alteration
- chlorite, chloritic clays

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-317-98	LOCATION	STOPE 50 ACCESS, SECTION 1675	REMARKS	
PAGE 1 OF	4	NORTHING		completed hole 9/24/98	
DATE	11-03-98	EASTING			
LOGGED BY	WHITLEY	ELEVATION			
SCALE	1" = 10'	AZIMUTH	125°		
TOTAL DEPTH	232'	INCLINATION	35°		

LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
0-29		PLANAR/LAMINAR med gry-tan fg volcanic. Prominent flat foliation marked by crenulated, discontinuous partings and by vesicle trains. partings gently marked by chlorite, vesic. faint to prom., gently dtg, gently ≤3mm 22.2-27 densely packed vesicles ≤5mm. wk warmy overprint. Leopard Spot Tuff? 27-29 less foliation; transition to FGM	10 20		12 fol. 45 to CA 10-29 fxs cmn ≤20, 35, 55 to CA counter fol. 10 fol. 45 to CA 22.5 fol. 45 to CA	0-14.5 common hairline to 1/8" s- vnlts, thinnest are vfg dk s- & discontin. widest are g-cly-mare-py. w/ fe orientations. rare barite 14.5-20.7 vnlts uncommon. pick up patchy vfg dk s-. 20.7-22.2 g-cly-mareas sx matrix. mare. Fldsites ⊥ to clastedges. 22.2-31 continue patchy s- vnlts uncommon. 29 start wk arg.
29-31		WARMY SPLAT typical for type	30		29 fol. 55 to CA 31 ctc 50° to CA 31 fxs less common. ≤5° to CA dominant, w/ 50, 30, & 70	31-38 continue patchy s- & rare vnlts. grn, hard, warm/cly is common on fxs.
31-54		FINE-GRAINED MASSIVE Med gry-tan, dense, vfg volcanic. non-foliated. non-vesicular. ~~Identifying~~ character is crackle fxs. 316 PIMA 31-37 continue warmy type texture 38-40 wandering bx vnlts w/ strly chloritic matrix.	40 50			38-42.5 py-cly vnlt-sub// to CA. 1/8"-1/2", wanders, py fg & subhedral. 47-51.5 py-cly vnlt sub// to CA. 1/8-1/2", wanders. py as previ.

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	A
0	5					
5	10					
10	14.5					
14.5	18.3					
18.3	20.7					
20.7	22.2					
22.2	27					
27	31					
31	35					
35	38					
38	42.5					
42.5	47					
47	51.5					

HOLE NUMBER D-317-98 PAGE 2 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
31-54		FINE GRAINED MASSIVE			continuing fcs, uncommon, 60, 45, 30 to CA	
54-72		VITROPHYRE med-gry dense, vfg volcanic. non foliated, distinctive trait is cracks fx in conchoidal pattern. fragments display vl growth in cores. 58.6-72 heated bx in hanging wall of fault. Was strly chloritic, now wkly bleached. matrix is ? but unsilicified	60		54 contact ground away	54 end wk arg. 58.4-72 series of py-clay ± q-cly-marc-py vnlts sub// to CA. 1/8"-1", wanders
72-81		FAULT BRECCIA matrix support, matrix >> clasts, wkly chlor clasts of vitro in med brn silicified matrix. clasts rnd to ang, wkly arg.	70		72 cte ~10° to CA	74-75 q-cly-marc-py vnlt ~½", 10° to CA. 76.5-81 patchy S⁻ ± wandering vnlts
81-114.6		VITROPHYRE generally as previous 81-83.7 strly arg'd ± ground - footwall effect of fault. 110-111.5 strly arg'd, gouge zone. cts 60° to CA	80 90 100 110		81 cte ~50° to CA (?) 81 fcs rare 40 ± 70° to CA 114.6 cte 55 to CA	83.7-90.3 py-cly vnlt, ½"-1", sub// to // CA. wanders 90.3-92 rare veinlets of dark S⁻ ± pyr. hairline to 1/8". 40° ± 70° to CA. also irreg along crackle fcs. 114.6 continue rare vnlts to 123 cte ~127 mod chloritic
114.6-157		FINE GRAINED MASSIVE med tan, dense, vfg, non foliated volc. gen'ly as descr. previous.	120			

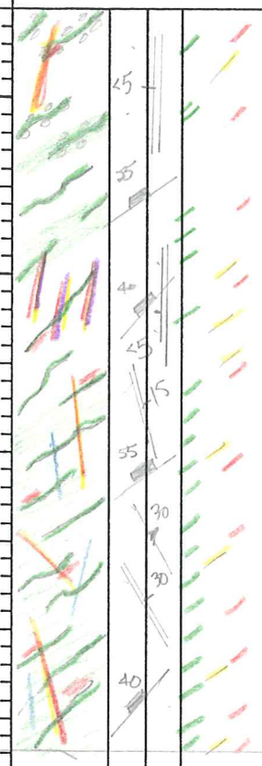
ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
47	51.5				
51.5	54				
54	58.4				
58.4	62				
62	64				
64	67				
67	72				
72	76.5				
76.5	81				
81	83.7				
83.7	87				
87	90.3				
90.3	92				
92	97				
97	102				
102	107				
107	111				
111	114.6				
114.6	119				
119	123				

HOLE NUMBER D-317-98 PAGE 3 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
114.6–157		FINE GRAINED MASSIVE				
		[155-157] bx. clast support. angular. little tonne expansion/rotation				[127] start wk-mod arg [132-ctc] wkly chloritic [137] start splotch 5⁻ – vfg dk ⅓ pyr. rare ⅓-py vnlts to ¼", 40° & 70° to CA [148-152] sub// CA bx-marc-⅓ bx vnlt. open, w/ crse xls, irregular [152-ctc] abund dissem. & splotchy py [ctc-162] sparse webwork of ⅓-py vnlts; hairline to ⅛". open. vfg. intrinsic splotchy 5⁻ [167] end wk-mod arg [174-176] ¼"-½" ⅓-dy-marc bx vnlt. gently sub// to CA
157-232 TD		PLANAR/LAMINAR med tan, fg, foliated volc. generally as described previous. common chloritized lithics to 10mm. [157-162] bx, pl/lam clast in visiliif, volc(?) matrix [162-176] dense, weakly crackled zone w/ little foliation. transitional texture to FGM. [176-197] vesicle trains			[137] ctc 55 to CA [167] fol. 60° to CA [177] fol 60° to CA [185] fol 50 to CA	

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
119	123				
123	127				
127	132				
132	137				
137	141				
141	145				
145	148				
148	152				
152	157				
157	162				
162	167				
167	172				
172	176				
176	179				
179	182				
182	187				
187	192				

HOLE NUMBER D-317-98 PAGE 4 OF 4

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
157-232 TD		PLANAR/LAMINAR [197] end of vesicles. becomes slitely more dense & less foliated. [208-TD] much more dense, w/ little foliation. transitional texture to FGM.	200 210 220 230		[200] fol. 55 to CA [207] fol. 40 to CA [208] start fx set 15, 30, 40 75 (rare). uncommon. [215] fol. 55 to CA [232] fol. 40° to CA	[192-196] q-marc. vult. open w/ f-mg xls. ¼". sub// to CA. [204.5-208] coarse bd-marc-q veins. irregular - ¼" to >1½" bx vein. sub// to 10° to CA. open; nice xls. [208-TD] splotchy fg-mfg py & rare-uncom hairline to ⅛" q-py vnlts [215-TD] rare calcite in irregular hairline vnlts low ∠s to CA.
		232 TD	240			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	
187	192					
192	195					
195	200					
200	204.5					
204.5	208					
208	212					
212	217					
217	222					
222	227					
227	232					

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-317-98 DATE: 11-03-98 LOGGED BY: WHITNEY PAGE 1 OF 3

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
0	5	20	ground core 94	0										
5	10	72	98	9										
10	12	80	80 ?	0										
12	14.5	32	ground core 92	0										
14.5	20.5	60	lost clay 85	18										
20.5	27	75	ground core 106	17										
27	37	84	96	31										
37	47	83	ground core 97	23										
47	54	64	100	0										
54	62	90	100	39										
62	72	74	92	6										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D317-98 DATE: 11-03-98 LOGGED BY: WHITNEY PAGE 2 OF 3

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
72	82	80	lost clay gouge 91 grind core	29										
82	92	82	100 grind core	21										
92	102	92	97	64										
102	111	96	104	70										
111	119	96	105	56										
119	127	93	100	31										
127	137	90	ground core 94	30										
137	147	73	93	0										
147	152	38	74	0										
152	162	76	100	19										
162	172	93	97	29										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D 317-98 DATE: 11-04-98 LOGGED BY: WHITNEY PAGE 3 OF 3

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
172	182	96	96	50										
182	192	95	98	51										
192	202	89	97	37										
202	209	90	93	31										
209	212	70	87	0										
212	222	100	100	55										
222	232 TD	100	100	50										

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP051506

PO BOX 11530
RENO NV, USA
Ph.(702) 356-0606, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

:

:

:

CLIENT REFERENCE No: D-317-98 RECEIVED : 10 NOV 1998

No. SAMPLES : 58 REPORTED : 24 NOV 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP051506

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-317-98 00-05	<0.001			0.02
D-317-98 05-10	<0.001			0.02
D-317-98 10.0-14.5	<0.001			<0.02
D-317-98 14.5-18.3	<0.001			0.03
D-317-98 18.3-20.7	0.020			0.03
D-317-98 20.7-22.0	4.277		5.409	5.40
D-317-98 22-27	0.003			0.06
D-317-98 27-31	0.003			0.03
D-317-98 31-35	0.001			0.02
D-317-98 35-38	0.005			0.03
D-317-98 38.0-42.5	0.003			0.04
D-317-98 42.5-47.0	<0.001			0.02
D-317-98 47.0-51.5	0.002			0.07
D-317-98 51.5-54.0	0.003			0.06
D-317-98 54.0-58.4	0.003			0.06
D-317-98 58.4-62.0	0.003			0.03
D-317-98 62-64	0.005			0.04
D-317-98 64-67	<0.001			0.02
D-317-98 67-72	0.033	0.030		0.06
D-317-98 72.0-76.5	0.022			0.05
D-317-98 76.5-81.0	<0.001			<0.02
D-317-98 81.0-83.7	0.001			0.02
D-317-98 83.7-87.0	0.018	0.014		0.02
D-317-98 87.0-90.3	0.002			0.02
D-317-98 90.3-92.0	<0.001			0.04

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP051506

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-317-98 92-97	0.003			0.04
D-317-98 97-102	<0.001			0.02
D-317-98 102-107	<0.001			0.03
D-317-98 107-111	<0.001			0.04
D-317-98 111.0-114.6	0.003			0.02
D-317-98 114.6-119.0	<0.001			<0.02
D-317-98 119-123	<0.001			<0.02
D-317-98 123-127	<0.001			<0.02
D-317-98 127-132	<0.001			<0.02
D-317-98 132-137	<0.001	<0.001		<0.02
D-317-98 137-141	<0.001			<0.02
D-317-98 141-145	0.002			0.04
D-317-98 145-148	0.008			0.05
D-317-98 148-152	0.026			0.61
D-317-98 152-157	0.002			0.05
D-317-98 157-162	0.003			0.11
D-317-98 162-167	0.003			0.07
D-317-98 167-172	<0.001			0.02
D-317-98 172-176	0.016			0.07
D-317-98 176-179	0.013			0.07
D-317-98 179-182	0.004			0.04
D-317-98 182-187	0.010			0.05
D-317-98 187-192	0.002			0.06
D-317-98 192-195	0.012			0.06
D-317-98 195-200	0.003			0.08

AMERICAN ASSAY LABORATORIES

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PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-317-98 200.0-204.5	0.001	0.001		0.03
D-317-98 204.5-208.0	0.005			0.13
D-317-98 208-212	<0.001			<0.02
D-317-98 212-217	<0.001			<0.02
D-317-98 217-222	0.003			0.03
D-317-98 222-227	0.007			0.03
D-317-98 227-232	0.002			0.05
46580	0.525			3.04

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 0051506-IN
INVOICE DATE: 11/30/98

INVOICE TO:
THE ROSEBUD MINING CO., LLC
HECLA MINING COMPANY, OPERATOR
P.O. BOX 2610
WINNEMUCCA NV 89446

THE ROSEBUD MINING CO., LLC
HECLA MINING COMPANY, OPERATOR
P.O. BOX 2610
WINNEMUCCA NV 89446

CUSTOMER P.O.	PROJECT	TERMS
D-3177-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
58	SAMPLES RECEIVED	.00	.00
57	DRYING	1.00	57.00
57	JAW CRUSHING CHARGE	1.30	74.10
57	COARSE MILLING CHARGE	4.50	256.50
57	SPLITTING CHARGE	2.40	136.80
57	RING MILLING CHARGE	2.00	114.00
58	Au (1 A.T. FIRE ASSAY)	8.00	464.00
1	Au ANALYSES/GRAVIMETRIC	8.75	8.75
58	HYDROCHLORIC/NITRIC DIGESTION	2.00	116.00
58	Ag ANALYSES	1.00	58.00

86-5110-477
EDA

NET INVOICE:	1,285.15
LESS DISCOUNT:	257.03
FREIGHT:	.00
INVOICE TOTAL:	1,028.12

xAMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP051506

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(702) 356-0606, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN
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CLIENT REFERENCE No: D-317-98 RECEIVED : 10 NOV 1998

No. SAMPLES : 58 REPORTED : 24 NOV 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051506

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-317-98 00-05	<0.001			0.02
D-317-98 05-10	<0.001			0.02
D-317-98 10.0-14.5	<0.001			<0.02
D-317-98 14.5-18.3	<0.001			0.03
D-317-98 18.3-20.7	0.020			0.03
D-317-98 20.7-22.0	4.277		5.409	5.40
D-317-98 22-27	0.003			0.06
D-317-98 27-31	0.003			0.03
D-317-98 31-35	0.001			0.02
D-317-98 35-38	0.005			0.03
D-317-98 38.0-42.5	0.003			0.04
D-317-98 42.5-47.0	<0.001			0.02
D-317-98 47.0-51.5	0.002			0.07
D-317-98 51.5-54.0	0.003			0.06
D-317-98 54.0-58.4	0.003			0.06
D-317-98 58.4-62.0	0.003			0.03
D-317-98 62-64	0.005			0.04
D-317-98 64-67	<0.001			0.02
D-317-98 67-72	0.033	0.030		0.06
D-317-98 72.0-76.5	0.022			0.05
D-317-98 76.5-81.0	<0.001			<0.02
D-317-98 81.0-83.7	0.001			0.02
D-317-98 83.7-87.0	0.018	0.014		0.02
D-317-98 87.0-90.3	0.002			0.02
D-317-98 90.3-92.0	<0.001			0.04

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051506

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-317-98 92-97	0.003			0.04
D-317-98 97-102	<0.001			0.02
D-317-98 102-107	<0.001			0.03
D-317-98 107-111	<0.001			0.04
D-317-98 111.0-114.6	0.003			0.02
D-317-98 114.6-119.0	<0.001			<0.02
D-317-98 119-123	<0.001			<0.02
D-317-98 123-127	<0.001			<0.02
D-317-98 127-132	<0.001			<0.02
D-317-98 132-137	<0.001	<0.001		<0.02
D-317-98 137-141	<0.001			<0.02
D-317-98 141-145	0.002			0.04
D-317-98 145-148	0.008			0.05
D-317-98 148-152	0.026			0.61
D-317-98 152-157	0.002			0.05
D-317-98 157-162	0.003			0.11
D-317-98 162-167	0.003			0.07
D-317-98 167-172	<0.001			0.02
D-317-98 172-176	0.016			0.07
D-317-98 176-179	0.013			0.07
D-317-98 179-182	0.004			0.04
D-317-98 182-187	0.010			0.05
D-317-98 187-192	0.002			0.06
D-317-98 192-195	0.012			0.06
D-317-98 195-200	0.003			0.08

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051506

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-317-98 200.0-204.5	0.001	0.001		0.03
D-317-98 204.5-208.0	0.005			0.13
D-317-98 208-212	<0.001			<0.02
D-317-98 212-217	<0.001			<0.02
D-317-98 217-222	0.003			0.03
D-317-98 222-227	0.007			0.03
D-317-98 227-232	0.002			0.05
46580	0.525			3.04

xAMERICAN ASSAY LABORATORIES
ANALYSIS REPORT SP051506

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(702) 356-0606, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN
:
:
:

CLIENT REFERENCE No: D-317-98 RECEIVED : 10 NOV 1998

No. SAMPLES : 58 REPORTED : 24 NOV 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051506

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-317-98 00-05	<0.001			0.02
D-317-98 05-10	<0.001			0.02
D-317-98 10.0-14.5	<0.001			<0.02
D-317-98 14.5-18.3	<0.001			0.03
D-317-98 18.3-20.7	0.020			0.03
D-317-98 20.7-22.0	4.277		5.409	5.40
D-317-98 22-27	0.003			0.06
D-317-98 27-31	0.003			0.03
D-317-98 31-35	0.001			0.02
D-317-98 35-38	0.005			0.03
D-317-98 38.0-42.5	0.003			0.04
D-317-98 42.5-47.0	<0.001			0.02
D-317-98 47.0-51.5	0.002			0.07
D-317-98 51.5-54.0	0.003			0.06
D-317-98 54.0-58.4	0.003			0.06
D-317-98 58.4-62.0	0.003			0.03
D-317-98 62-64	0.005			0.04
D-317-98 64-67	<0.001			0.02
D-317-98 67-72	0.033	0.030		0.06
D-317-98 72.0-76.5	0.022			0.05
D-317-98 76.5-81.0	<0.001			<0.02
D-317-98 81.0-83.7	0.001			0.02
D-317-98 83.7-87.0	0.018	0.014		0.02
D-317-98 87.0-90.3	0.002			0.02
D-317-98 90.3-92.0	<0.001			0.04

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051506

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-317-98

REPORTED : 24 NOV 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-317-98 92-97	0.003			0.04
D-317-98 97-102	<0.001			0.02
D-317-98 102-107	<0.001			0.03
D-317-98 107-111	<0.001			0.04
D-317-98 111.0-114.6	0.003			0.02
D-317-98 114.6-119.0	<0.001			<0.02
D-317-98 119-123	<0.001			<0.02
D-317-98 123-127	<0.001			<0.02
D-317-98 127-132	<0.001			<0.02
D-317-98 132-137	<0.001	<0.001		<0.02
D-317-98 137-141	<0.001			<0.02
D-317-98 141-145	0.002			0.04
D-317-98 145-148	0.008			0.05
D-317-98 148-152	0.026			0.61
D-317-98 152-157	0.002			0.05
D-317-98 157-162	0.003			0.11
D-317-98 162-167	0.003			0.07
D-317-98 167-172	<0.001			0.02
D-317-98 172-176	0.016			0.07
D-317-98 176-179	0.013			0.07
D-317-98 179-182	0.004			0.04
D-317-98 182-187	0.010			0.05
D-317-98 187-192	0.002			0.06
D-317-98 192-195	0.012			0.06
D-317-98 195-200	0.003			0.08

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP051506

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SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
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D-317-98 204.5-208.0	0.005			0.13
D-317-98 208-212	<0.001			<0.02
D-317-98 212-217	<0.001			<0.02
D-317-98 217-222	0.003			0.03
D-317-98 222-227	0.007			0.03
D-317-98 227-232	0.002			0.05
46580	0.525			3.04

SP

SUBMITTAL FORM

American Assay Laboratories

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Fax
(702) 738-2594

Mazatlan Office
Telephone/Fax
011-52-69-170035

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Santiago, Chile
Mendoza, Argentina

Company: ROSEBUD MINING LLC

Address: PO Box 2610

City WINNEMUCCA State NV Zip 89445

Telephone Number: (702) 623-6912 Fax Number: (702) 623-6927

Project Name: DEVELOPMENT Purchase Order Number:

Date Submitted: 11/6/98 Number of Samples: 57

RESULTS REPORTED IN: ppm [ ] ppb [ ] opt [ ] AU/Ag according to Rosebud Mine protocol

D317-98 SAMPLE IDENTIFICATION			TYPE	ELEMENTS REQUIRED
0-5	58.4-62	114.6-119		179-182
5-10	62-64	119-123		182-187
10-14.5	64-67	123-127		187-192
14.5-18.3	67-72	127-132		192-195
18.3-20.7	72-76.5	132-137		195-200
20.7-22.2	76.5-81	137-141		200-204.5
22.2-27	81-83.7	141-145		204.5-208
27-31	83.7-87	145-148		208-212
31-35	87-90.3	148-152		212-217
35-38	90.3-92	152-157		217-222
38-42.5	92-97	157-162		222-227
42.5-47	97-102	162-167		227-232 TD
47-51.5	102-107	167-172		
51.5-54	107-111	172-176		
54-58.4	111-114.6	176-179		

COARSE REJECTS (Normally Discarded After 60 Days)

[ ] Return COD after analysis complete

PULPS (Normally Stored Free For One Month)

[ ] Discard after one month
[ ] Return COD after one month

RESULTS AND INVOICES TO BE SENT TO:

Invoice to: Kurt Allen

Results to: Kurt Allen

Comments:

CLIENT FILE COPY

D-317-98	35	35	127.7
	115	35	128.2
	232	35	129.7

D-317-98 BOX 2
DEPTH 9_5 - 19
14.5
10.
12

D-317-98 BOX 1
DEPTH 0 - 9_5
5

D-317-98 BOX 3
DEPTH 19 - 28
20.5
27

D-317-98 BOX 5
DEPTH 37_5 - 47

D-317-98 BOX 4
DEPTH 28 - 37_5

D-317-98 BOX 6
DEPTH 47 - 55_5
47
54

D-317-98 BOX 8
DEPTH 64_5 - 73

D-317-98 BOX 7
DEPTH 55_5 - 64_5

D-317-98 BOX 9
DEPTH 73 - 83

D-317-98
BOX 11
DEPTH
92 - 101_5
92

D-317-98
BOX 10
DEPTH
83 - 92

D-317-98
BOX 12
DEPTH
101_5 - 110
102

D-317-98
BOX 14
DEPTH
119 - 128
119
127

D-317-98
BOX 13
DEPTH
110 - 119

D-317-98
BOX 15
DEPTH
128 - 138
137

152
D-317-98 BOX 17
DEPTH 148 - 158_5

147
D-317-98 BOX 16
DEPTH 138 - 148

162
D-317-98 BOX 18
DEPTH 158_5 - 168

D-317-98 BOX 20
DEPTH 177_5 - 187
187

D-317-98 BOX 19
DEPTH 168 - 177_5
172

D-317-98 BOX 21
DEPTH 187 - 196
192

209
217
D-317-98
BOX 23
DEPTH
205_S - 215

202
D-317-98
BOX 22
DEPTH
196 - 205_S

D-317-98
BOX 24
DEPTH
215 - 224_S

D-317-98
BOX 25
DEPTH
224_5 - 232 TD

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-317-98
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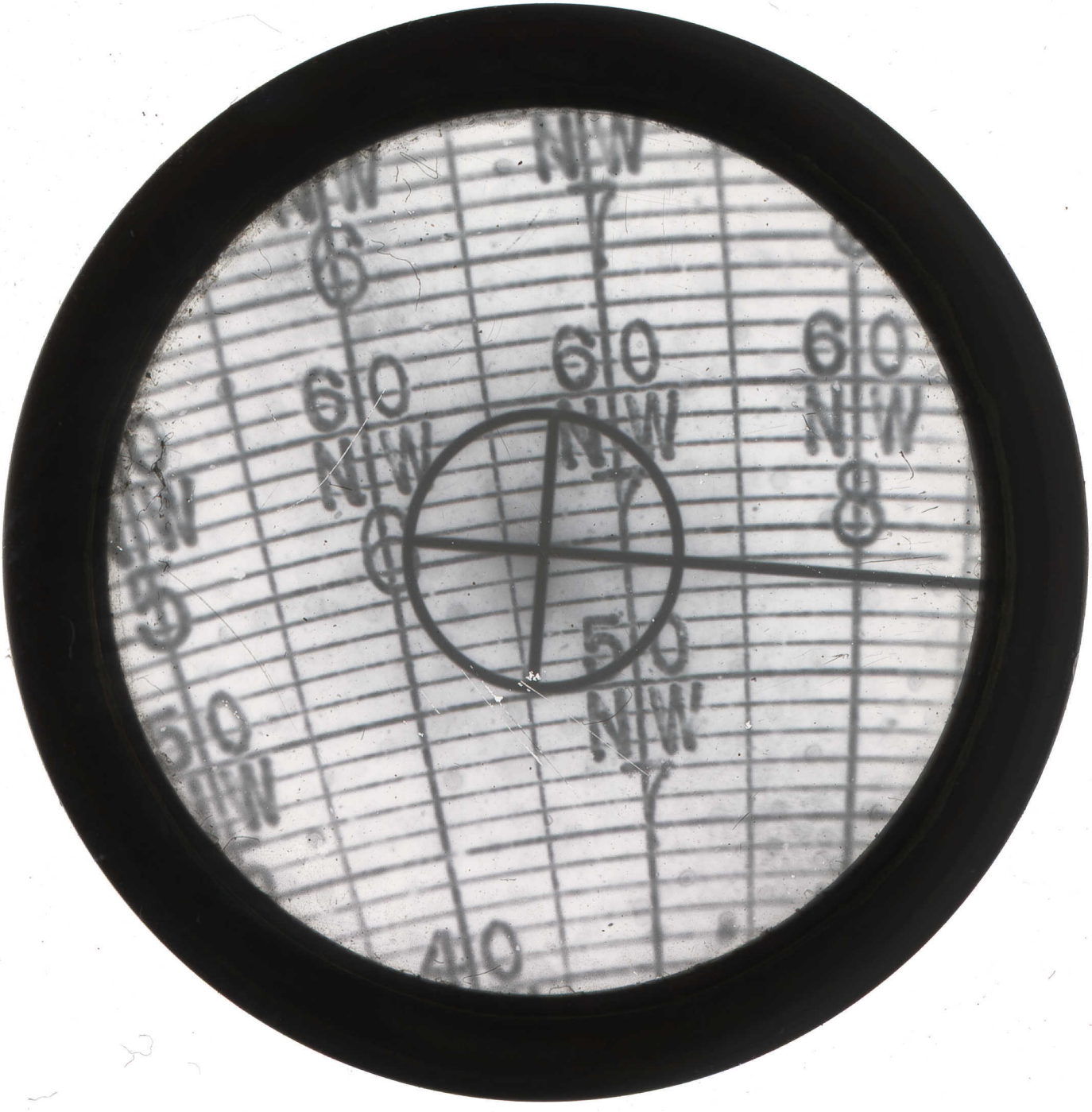
TAKEN BY Moyvan / Jerome
DEPTH 732
DATE 9-24-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO.
HI-1408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NW
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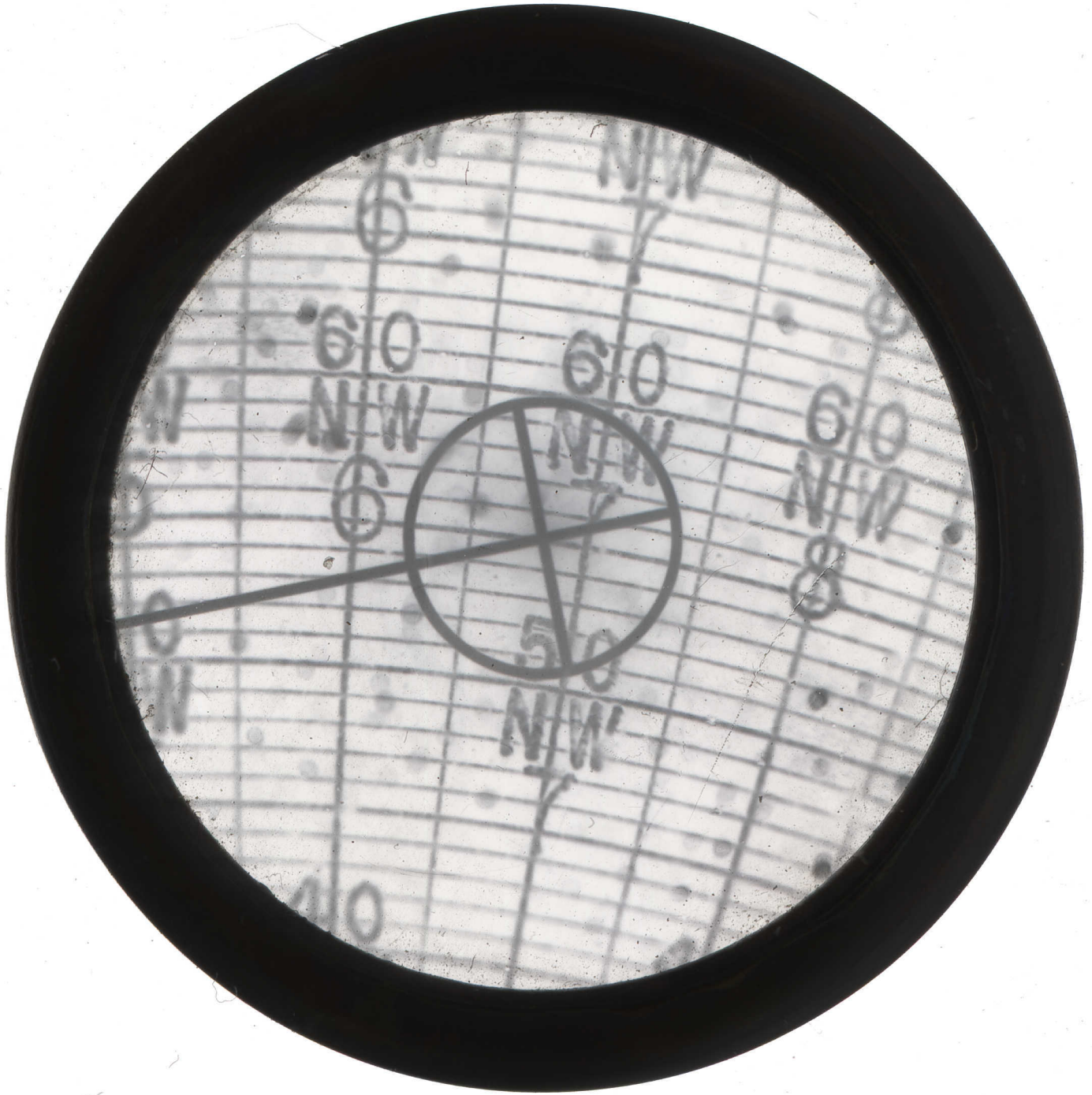
SINGLE SHOT
PHOTO DISC RECORD

COMPANY Heck
WELL NAME D-317-98
LEASE
TAKEN BY Magnum Lterrame
DEPTH 115
DATE 9-24-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO.
HI-1408

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-317-98
LEASE
TAKEN BY Roger Kerone
DEPTH 35
DATE 9-24-98
DRIFT ANGLE
DIRECTION
TYPE
JOB NO.
HI-1408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