6000 0617

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. RS-496
AUTHOR	D. Schoerl; J. P. Rogowski; B. Morris; K Allen; L. E. Markedon
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; Rosebud Mining Co. L.L.C.; Rosebud Project; Hecla Mining Co North Equinox
COMMODITY If not obvious	gold; silver
NOTES	drill logs; geology; assay; total depth 885'; invoice; geochemistry 63p.

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 3/21/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

RS-496 YV2000

E of N. Equinos

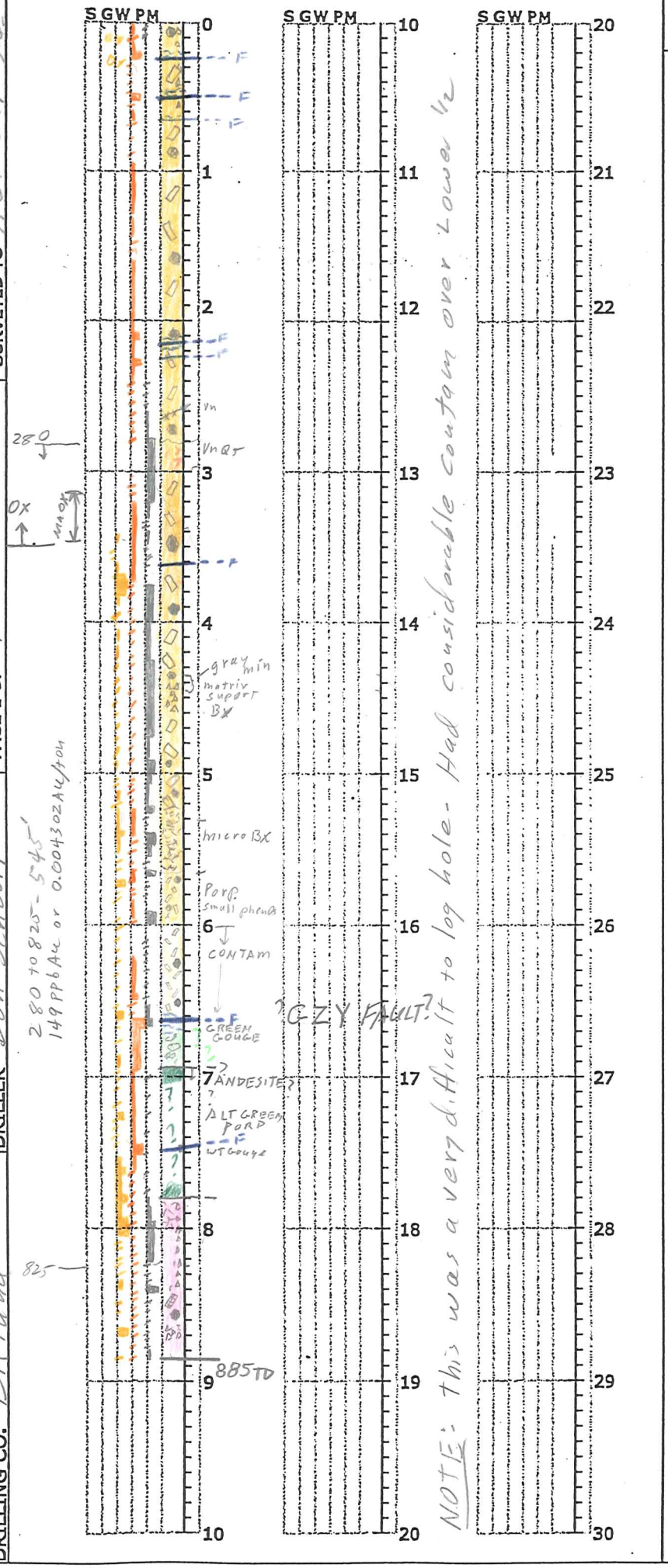
60000617
4010

6000 0617

ROSEBUD MINING COMPANY, LLC.

HOLE #	RS-496
FINISH HOLE	5 Apr 2000
LOGGED BY	Ropowski
T.D	885 TD
SURVEYED TO	Not Surveyed
START HOLE	29 Apr 2000
HOLE TYPE	RC - 6"
ANGLE	-90
BEARING	
PAGE 1 OF	10
COLLAR COORDINATES	
NORTH	2,212,485 N
EAST	479,773
ELEV	5900
DRILLING CO.	EH Lund
DRILLER	Don Schoorl

E. of N. Equinox to hit GZY fault



ALTERATION INTENSITY

1 WEAK — 2 MODERATE — 3 STRONG

VERITHIN COLOR

~~787~~	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

825
280
545

RBQL TYPE PORPHYRY Tc

ANDESITE

LBT/WR

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

INTENSITY
1 = WEAK
2 = MODERATE
3 = STRONG
or % by Vol

HOLE NUMBER RS-496
PAGE 2 OF 10
DATE 29 Apr to 5 Apr 2000
LOGGED BY Rogowski
TOTAL DEPTH 885 TD

LOCATION ROSEBUD, NV
NORTHING 2,221,485
EASTING 479,773
ELEVATION 5,900
AZIMUTH —
INCLINATION -90°

AREA N. Equinox
DRILLING CO. Eklund
RIG TYPE 75E 6" RC
HOLE SIZE 6"
DOWN HOLE SURVEY BY ~~Wet Nav~~ No Survey

0 - 100 2/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE
0			0-10 Tc porp (RBQL type) Had strong Py (now oxidized) Bx in part		Porphyritic Reddish Brown
10			10-20 sim to above but much less alt & more Bx (mono Lithic m.s.)		
20					
30			0-100 all of it is (RQLP type) K-spar is soft wt clay, & has cousil Hem stain		
40					
50			Red clay gouge. Bio phenos appear fresh.		
60			Red clay		
70					
80					
90					
100			yell Jaro		

FEET	ALTERATION: SILICIFICATION 5%	15%	+25%	MATRIX %	CLASTS %	ARGILLIC 5%	15%	+25%	TYPE	PROPYLITIC % CHLORITE	CALCITE	POTASSIC % K-SPAR	ALUNITE	OXIDATION 5%	15%	+25%	VIENING %	TYPE	MINERALIZATION: SULFIDES 5%	15%	+25%	PY %	CPY %	MAR %	K-SUL %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLYBDE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
0	Tr					2					0											0	ox					ox Py								
10	Tr					2					0												ox					ox Py								
20	0					1					0																									
30						3					1																									
40						1																														
50						3					Tr																									
60						1					1																									
70						2					2																									
80						1					Tr																	Strong oxidization								
90						1					Tr																									
100	0					2					1											0						ox	yell Jar	0						

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

INTENSITY
1 = WEAK
2 = MODERATE
3 = STRONG
or % by Vol

HOLE NUMBER RS-496
PAGE 3 OF 10
DATE
LOGGED BY
TOTAL DEPTH

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

1 - 200

3/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	15%	+25%	MATRIX %	CLASTS %	ARGILLIC 5%	15%	+25%	TYPE	PROPYLITIC % CHLORITE	CALCITE	POTASSIC % K-SPAR	ALBITE	OXIDATION 5%	15%	+25%	VIENING %	TYPE	MINERALIZATION: SULFIDES 5%	15%	+25%	PY %	CPY %	MAR %	X-SLF %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLYBDE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
100		RQL Type Porphyry	100 to 200	H	K-spar to clay - MOTTLED - Porphyritic Pink - Yellow & tan some blk	0					2					0											0														
110			RQL Type porp.								2																														
			very strong Hem																																						
120			stain overall																																						
			& red infract.																																						
130			Feld alt to wt								2																														
			clay. Bio gone								1 to 2																														
140			See casts																																						
			prob some plag																																						
150			but can't tell																																						
			from K spar								1-2																														
160											2																														
			NOTE: last yr																																						
170			would have called																																						
			Gator porp.																																						
180			could be Qt plag																																						
			but not sure.																																						
190			Has num micro																																						
			Qt veinlets																																						
200				H		0					2					0											0														

Qtz Py is high - num specks of Jarosite & blk Hem with overall pink Hem stain

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

INTENSITY
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HOLE NUMBER RS-496
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DATE
LOGGED BY
TOTAL DEPTH

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY NO SURVEY

2-300 4/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MASSIVE %	SILICIFICATION QUARTZ %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	AC-SUL %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLSURE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
200			200 to 300 all R.B.Ql. porphyry w/ varying amts of clay alt & Iron stain	H		0				2						0											0														
210			gray gouge	H						2																															
			Feld alt to wt clay or leached out	S						3																															
220			wt gouge	H						2																															
			Bio as casts	S						3																															
230			Qualy or Hem	H						2-3																															
			replaced							1-2																															
240		PHYOLITE PORPHYRY			Porphyritic white to Reddish Brown					2																															
			Hem ↑ ↓ No Hem			0				1																															
250						1				1																															
						1				1																															
260						Tr				1-2																															
		Vn Qt Tr Bx				2				1																															
270			microQt			2				tr																															
		VnQt	Vnlets			2				1																															
280				H		2				1																															
	silica	vn Qt	286-305 ~~Vn Qt~~ - total Qt. Rep.	VH		+3				0						0											0														
290	silica	Vn Qt	of RBQL typ. porp			+3																																			
	silica	Vn Qt	vuggy, casts of leached out Feld. Blk MnOx			+3																																			
300	silica	Vn Qt	coating fract. Jaro, Hem & wt clay common	VH		+3				0						0											0														

Very strong Ox - Hem & Jaro fills or Py

Prob silicification around ~~qtz~~ structure.

2 12

17 APR 2000

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

INTENSITY
1 = WEAK
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3 = STRONG
or % by Vol

HOLE NUMBER RS-496
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DATE
LOGGED BY
TOTAL DEPTH

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

3-400

5/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MATRIX %	SILICIFICATION CLASTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	K-SUL %	SULFATE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOISTURE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
300		Vn?	300 400	VH	Porphyritic Gray + Oxidized Gray	3					0					0											0														
310			RBQL type	VH		3					tr																														
			porphyry	H		3					tr																														
320						3					1											tr	mucy																		
						2					2											tr	mucy																		
330						2					2							Tralunite on fract				1	"																		
						1					2											3	"																		
340						1					2											3	"	+Jaro																	
						2					1											3	"	+Jaro			0														
350						2					2																2														
						tr					2																2														
360			Py Gossan			tr					2																1	+	strong Ox						L							
						tr					2+3																1	+	mod Ox						L							
370						tr					2																2	+	mod Ox						L							
						1					2																6														
380						2+3					1																10	PyC													
					Gray	3 ← Bim silicification					tr																10	PyC													
390						3	"				tr																5	Py													
						2+3					tr																3														
400				H		3					1					0											2														

Qr Rep
QT Rep
QT
Rep
QT Rep
Q tMon

Py Gossan

Ox
Un Ox

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ROSEBUD PROJECT DRILL LOG

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TOTAL DEPTH

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

4-500

6/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MATRIX %	SILICIFICATION CLASTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	K-SUL %	SULFATE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLYBDENITE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
400		RBQL Type Porphyry - Phyo-	400-500	VH	Silicified Porphyritic Lt gray w/ varying Reddish & Brown	2					1					0											3	Py H A													
410			RBQL type porp. strong silicification varying and unusual colors mixed in w/ silica see brownish like adularia and in 445 to 480 the silica has a hint of olive green.			2					1																2	"									←	tr	flow band			
420						2					2 w/ tr clay																4														
430						2+3					1																1														
440						2+3					1																5														
450						3					tr																2									←	gray min			
460						3					tr																2														
470						3					1																3										11				
480						3					1																2														
490						2+3					tr																3														
500						3					1																2														
						2					1																1														
						3					1																1														
						2+3					1																1														
						2					2+1																2														
						2					1																2														
						3					1																2														
						3					tr					0											2														

MS-SiO2 M BX — what little Kspar that remains is alt to wt clay. Generally looks like silicified Cutor or RBQL Porp. do not see any struct.

Py in veinlets

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

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LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

5-600

7/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	15%	+25%	MATRIX %	CLASTS %	ARGILLIC 5%	15%	+25%	TYPE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	ALUNITE	OXIDATION 5%	15%	+25%	VIENING %	TYPE	MINERALIZATION: SULFIDES 5%	15%	+25%	PY %	CPY %	MAR %	K-SUL %	SULFATE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLYBDE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
500		silicified Porphyry — Poss Rhyo / variable Bx spider text	500-600 RBQL type Porp	VH	with Tan	2B3					1					0										1														
510			strong silicification			2					1															1														
			& partial Bxed			2					1															3														
520			w/ silica matrix			2					1															1														
			@ 515 microBx			3					tr															3														
530			is approaching a			1					2															2														
			spider text. @ 525			1					2															3														
540			is very strong micro-			1					2															5														
			Bx (spider text) and			3					tr															1														
550			is diff to ID orig rock			3					1															4														
			continues to 555			2B3					1															2														
560			555 to 600 could			2B3					1															1														
			be a chilled RBQL			0					2															1														
570			porphyry. Poss a diff			3					1															0			← Hem Red color											
			porp. It is not Gonda			2					1															4														
580			but has a very fxly			1					2															1														
			groundmass. (could be			0					2?															0			—				Hem Red color							
590			silicified North Aude)		Not sure what it is Hem Red	0					2?															0							"			v				
						3					tr															1														
600				VH	gray	3					tr					0										1														

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

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HOLE NUMBER RS-496
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DATE
LOGGED BY
TOTAL DEPTH

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

6 - 700

8/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE
600		Rhyo. porp ? which one?	600 - 700 Has considerable contam from uphole 600 - 655 VFxln matrix porp w/ num small K-spar (?plug?) & Bio plus calcis. Hem. Rel. or gray but is greenish brown where silicified	H	Fxln Rhy. Porp & Porp Bx wit & Reddish & Brown
610					
620					
630					
640					
			600 to 640 has strong contam. from uphole 645 to 660 - 13 poss RBQL Bxal @ 655 to 660 Bx w/ porps & clearly some LBT/WR		
650					
660		? BUD-LIKE unit?	green clay gouge	H / V.S.	Pale green & Reddish Brn mud
670			660 to Soft, Pale green clay		
680			Like, w/ bio. Rep. by chlor & Num frags of RBQL? type Rhyo. - Could be BUD-Like unit in the LBT/WR		
690					
700			Andesite ?	VS	

FEET	ALTERATION: SILICIFICATION 5%	15%	+25%	MASSIVE %	QUARTS %	ARGILLIC 5%	15%	+25%	TYPE	PROPYLITIC % CHLORITE	CALCITE	POTASSIC % K-SPAR	ALUNITE	OXIDATION 5%	15%	+25%	VIENING %	TYPE	MINERALIZATION: SULFIDES 5%	15%	+25%	PY %	CPY %	MAR %	AS-SULF %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOCURE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
600	0					tr					0											1														
610	0					tr																tr														
	1					tr																1														
620	1					2																1														
	1					1																1														
630	tr					2																1														
	tr					2																tr														
640	1					1																0														
	1					2																1		tr												
	tr					3+2																3		tr												
650	2					1																tr		?												
660	2+3					1					0											3														
	0					+3					2											1														
670						3					2											1														
						3					1											tr														
680						3					2											tr														
						3					2											tr														
690						3					1											2														
						3					1											2														
700	0					tr					1											tr														

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

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LOGGED BY
TOTAL DEPTH

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

7-800

9/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MASSIVE %	SILICIFICATION QUARTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	AS-SUL %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLYBDENITE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
700		? ANDESITE?	695 to 780	MH	Porphyritic Pale green to gray	tr					2				2	1											tr														
710			?Andesite?-an alt green porphyry			tr					2					2											tr														
720			Not certain it is Andesite but some of phenos look like chloritized Femags			tr					2					2											tr														
											2					2											2	← v. fi. diss													
											2					2											4														
730											2					1											tr	← large cubes													
						tr					1					1											1														
740											2					1											tr														
		? ANDESITE?	w/ clay gouge								3					0											0														
750						tr					3					0											1														
						1					2					0											3														
760						1					2					tr											4														
						1					1			Bio to clay →		1											5														
770						1					1					0											2														
						2					1																5														
780				MH		2					1																7														
		RHYO FLOW	780 – very strong contam.	H		2					1					0											4														
790			Alt LBT/WR			23					tr					tr											4														
			Bxed + spider text		B	23					1					tr											2														
800				H		3					tr					tr											10														

Some 2 but not all looks like chlorite

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

INTENSITY
1 = WEAK
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3 = STRONG
or % by Vol

HOLE NUMBER RS-496
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DATE
LOGGED BY
TOTAL DEPTH 885

LOCATION ROSEBUD, NV
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY NO Survey

800-885 TD 10/10

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MAPPED %	SILICIFICATION QUARTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	K-SUL %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOLYBDE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
800		Bx	800 - 840 still a lot of	H		2					1					0											7	- Large cubes												
810			contamination.			2					1																1														
			Appears to be			3					tr																1														
820			LBt/wR that is		RHYO & Bx wt to Brown	3					tr					0											tr														
			Bxed in part			1					1					1											0														
830						1					1					1											tr														
						1					2					0											2														
840						3					tr					0											tr														
			840 - 885 LBt/wR - m. gray			tr					1					1											tr														
850			mix'd Rhyo flow		RHYO gray	1					1					1											tr														
			Blcrd wt along			1					1					1											tr														
860			fract & has tr			tr					1					1											0														
			of flow banding			tr					1					1											0														
870			865 to 875 is prob Contam - See Bx & red-Brn silicification		RHYO & Bx gray-Red & wt	2					tr					1											4														
						1					1					1											0														
880			880 - 885 - mottled LBt/wR Lt gray & dark speckled	H		1					1					1											0														
						2					1					1											1														
90			885 TD																																						
00																																									

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

PO BOX 11530
RENO NV,USA
Ph.(775) 336-0606, Fax.(775) 336-1413

HECLA MINING COMPANY

COPIES TO : BRIAN MORRIS
: KURT ALLEN
:
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NSI

CLIENT REFERENCE No: RS-496 RECEIVED : 7 APR 2000

No. SAMPLES : 178 REPORTED : 19 APR 2000

MAIN SAMPLE TYPE : DRILL CUTTINGS

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	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

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AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 19 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 000-005	17		<0.001		<0.5	<0.02
RS-496 005-010	29		<0.001		DTF	DTF
RS-496 010-015	13		<0.001		<0.5	<0.02
RS-496 015-020	17		<0.001		<0.5	<0.02
RS-496 020-025	<5		<0.001		<0.5	<0.02
RS-496 025-030	14		<0.001		<0.5	<0.02
RS-496 030-035	<5		<0.001		<0.5	<0.02
RS-496 035-040	5		<0.001		<0.5	<0.02
RS-496 040-045	7		<0.001		<0.5	<0.02
RS-496 045-050	17		<0.001		<0.5	<0.02
RS-496 050-055	5		<0.001		<0.5	<0.02
RS-496 055-060	8		<0.001		<0.5	<0.02
RS-496 060-065	10		<0.001		<0.5	<0.02
RS-496 065-070	8	6	<0.001	<0.001	<0.5	<0.02
RS-496 070-075	6		<0.001		<0.5	<0.02
RS-496 075-080	10		<0.001		<0.5	<0.02
RS-496 080-085	<5		<0.001		<0.5	<0.02
RS-496 085-090	67		0.002		<0.5	<0.02
RS-496 090-095	9		<0.001		<0.5	<0.02
RS-496 095-100	32		<0.001		<0.5	<0.02
RS-496 100-105	6		<0.001		<0.5	<0.02
RS-496 105-110	20		<0.001		<0.5	<0.02
RS-496 110-115	50		0.001		<0.5	<0.02
RS-496 115-120	7		<0.001		<0.5	<0.02
RS-496 120-125	7		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
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REFERENCE : RS-496

REPORTED : 19 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 125-130	8		<0.001		<0.5	<0.02
RS-496 130-135	5		<0.001		<0.5	<0.02
RS-496 135-140	11		<0.001		<0.5	<0.02
RS-496 140-145	<5		<0.001		<0.5	<0.02
RS-496 145-150	109	118	0.003	0.003	<0.5	<0.02
RS-496 150-155	44		0.001		<0.5	<0.02
RS-496 155-160	72	69	0.002	0.002	<0.5	<0.02
RS-496 160-165	37		0.001		<0.5	<0.02
RS-496 165-170	57		0.002		<0.5	<0.02
RS-496 170-175	15		<0.001		<0.5	<0.02
RS-496 175-180	<5		<0.001		<0.5	<0.02
RS-496 180-185	6		<0.001		<0.5	<0.02
RS-496 185-190	5		<0.001		<0.5	<0.02
RS-496 190-195	<5		<0.001		<0.5	<0.02
RS-496 195-200	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-496 200-205	<5		<0.001		<0.5	<0.02
RS-496 205-210	<5		<0.001		<0.5	<0.02
RS-496 210-215	<5		<0.001		<0.5	<0.02
RS-496 215-220	<5		<0.001		<0.5	<0.02
RS-496 220-225	<5		<0.001		<0.5	<0.02
RS-496 225-230	<5		<0.001		<0.5	<0.02
RS-496 230-235	<5		<0.001		<0.5	<0.02
RS-496 235-240	63	68	0.002	0.002	<0.5	<0.02
RS-496 240-245	53		0.002		<0.5	<0.02
RS-496 245-250	54		0.002		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

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REFERENCE : RS-496

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 250-255	72		0.002		<0.5	<0.02
RS-496 255-260	61		0.002		<0.5	<0.02
RS-496 260-265	62		0.002		<0.5	<0.02
RS-496 265-270	93		0.003		<0.5	<0.02
RS-496 270-275	19		<0.001		<0.5	<0.02
RS-496 275-280	76		0.002		<0.5	<0.02
RS-496 280-285	360		0.011		3.2	0.09
RS-496 285-290	531		0.015		3.6	0.11
RS-496 290-295	677	704	0.020	0.021	9.8	0.29
RS-496 295-300	346		0.010		7.7	0.22
RS-496 300-305	259		0.008		2.8	0.08
RS-496 305-310	195		0.006		1.6	0.05
RS-496 310-315	72		0.002		<0.5	<0.02
RS-496 315-320	53		0.002		<0.5	<0.02
RS-496 320-325	210		0.006		<0.5	<0.02
RS-496 325-330	100		0.003		<0.5	<0.02
RS-496 330-335	DTF		DTF		<0.5	<0.02
RS-496 335-340	272		0.008		<0.5	<0.02
RS-496 340-345	181		0.005		<0.5	<0.02
RS-496 345-350	104		0.003		<0.5	<0.02
RS-496 350-355	200		0.006		<0.5	<0.02
RS-496 355-360	355		0.010		<0.5	<0.02
RS-496 360-365	249	260	0.007	0.008	<0.5	<0.02
RS-496 365-370	162		0.005		<0.5	<0.02
RS-496 370-375	226		0.007		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

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REFERENCE : RS-496

REPORTED : 19 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 375-380	171		0.005		0.6	<0.02
RS-496 380-385	108		0.003		<0.5	<0.02
RS-496 385-390	171		0.005		0.5	<0.02
RS-496 390-395	127		0.004		<0.5	<0.02
RS-496 395-400	150		0.004		<0.5	<0.02
RS-496 400-405	133		0.004		<0.5	<0.02
RS-496 405-410	173		0.005		0.5	<0.02
RS-496 410-415	134		0.004		<0.5	<0.02
RS-496 415-420	72	68	0.002	0.002	1.5	0.04
RS-496 420-425	145		0.004		<0.5	<0.02
RS-496 425-430	90		0.003		0.5	<0.02
RS-496 430-435	110		0.003		<0.5	<0.02
RS-496 435-440	199		0.006		0.6	<0.02
RS-496 440-445	336	350	0.010	0.010	0.9	0.03
RS-496 445-450	148		0.004		<0.5	<0.02
RS-496 450-455	60		0.002		<0.5	<0.02
RS-496 455-460	109		0.003		<0.5	<0.02
RS-496 460-465	89		0.003		<0.5	<0.02
RS-496 465-470	132		0.004		0.6	<0.02
RS-496 470-475	144		0.004		0.6	<0.02
RS-496 475-480	77		0.002		0.5	<0.02
RS-496 480-485	51		0.001		<0.5	<0.02
RS-496 485-490	56		0.002		<0.5	<0.02
RS-496 490-495	130		0.004		<0.5	<0.02
RS-496 495-500	106		0.003		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 500-505	174		0.005		0.6	<0.02
RS-496 505-510	36		0.001		<0.5	<0.02
RS-496 510-515	75		0.002		<0.5	<0.02
RS-496 515-520	128		0.004		0.6	<0.02
RS-496 520-525	210		0.006		1.7	0.05
RS-496 525-530	264		0.008		3.0	0.09
RS-496 530-535	166		0.005		1.5	0.04
RS-496 535-540	51		0.001		0.7	0.02
RS-496 540-545	178		0.005		<0.5	<0.02
RS-496 545-550	276		0.008		1.4	0.04
RS-496 550-555	255		0.007		1.2	0.04
RS-496 555-560	239		0.007		0.7	0.02
RS-496 560-565	131		0.004		0.5	<0.02
RS-496 565-570	63		0.002		<0.5	<0.02
RS-496 570-575	73		0.002		0.5	<0.02
RS-496 575-580	70		0.002		0.6	<0.02
RS-496 580-585	49		0.001		<0.5	<0.02
RS-496 585-590	26		<0.001		<0.5	<0.02
RS-496 590-595	55		0.002		<0.5	<0.02
RS-496 595-600	140	148	0.004	0.004	0.5	<0.02
RS-496 600-605	82		0.002		<0.5	<0.02
RS-496 605-610	31		<0.001		<0.5	<0.02
RS-496 610-615	37		0.001		<0.5	<0.02
RS-496 615-620	109		0.003		<0.5	<0.02
RS-496 620-625	145		0.004		0.6	<0.02

AMERICAN ASSAY LABORATORIES

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 625-630	25		<0.001		<0.5	<0.02
RS-496 630-635	35		0.001		0.5	<0.02
RS-496 635-640	29		<0.001		<0.5	<0.02
RS-496 640-645	30		<0.001		0.5	<0.02
RS-496 645-650	116	126	0.003	0.004	0.6	<0.02
RS-496 650-655	142		0.004		0.6	<0.02
RS-496 655-660	108		0.003		0.8	0.02
RS-496 660-665	52		0.002		0.5	<0.02
RS-496 665-670	53		0.002		0.6	<0.02
RS-496 670-675	114		0.003		0.8	0.02
RS-496 675-680	38		0.001		0.6	<0.02
RS-496 680-685	53		0.002		0.6	<0.02
RS-496 685-690	106		0.003		1.1	0.03
RS-496 690-695	112	104	0.003	0.003	1.1	0.03
RS-496 695-700	72		0.002		0.8	0.02
RS-496 700-705	117		0.003		1.2	0.04
RS-496 705-710	103		0.003		1.1	0.03
RS-496 710-715	179		0.005		1.3	0.04
RS-496 715-720	190		0.006		1.3	0.04
RS-496 720-725	89	100	0.003	0.003	1.0	0.03
RS-496 725-730	60		0.002		0.5	<0.02
RS-496 730-735	175		0.005		1.2	0.04
RS-496 735-740	220		0.006		1.3	0.04
RS-496 740-745	165		0.005		1.2	0.04
RS-496 745-750	152		0.004		1.4	0.04

AMERICAN ASSAY LABORATORIES

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REFERENCE : RS-496

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 750-755	178		0.005		1.8	0.05
RS-496 755-760	182		0.005		1.5	0.04
RS-496 760-765	210		0.006		2.0	0.06
RS-496 765-770	154		0.004		1.5	0.04
RS-496 770-775	238	226	0.007	0.007	1.2	0.04
RS-496 775-780	118		0.003		0.7	0.02
RS-496 780-785	410		0.012		2.7	0.08
RS-496 785-790	311		0.009		2.4	0.07
RS-496 790-795	185		0.005		2.1	0.06
RS-496 795-800	191		0.006		2.1	0.06
RS-496 800-805			SAMPLE NOT RECEIVED			
RS-496 805-810	147		0.004		1.8	0.05
RS-496 810-815	93	86	0.003	0.003	0.9	0.03
RS-496 815-820	37		0.001		0.7	0.02
RS-496 820-825	308		0.009		<0.5	<0.02
RS-496 825-830	47		0.001		0.6	<0.02
RS-496 830-835	82		0.002		0.6	<0.02
RS-496 835-840	47		0.001		0.5	<0.02
RS-496 840-845	48		0.001		0.5	<0.02
RS-496 845-850	82		0.002		0.9	0.03
RS-496 850-855	39		0.001		0.8	0.02
RS-496 855-860	19		<0.001		0.6	<0.02
RS-496 860-865	10		<0.001		0.5	<0.02
RS-496 865-870	157	155	0.005	0.005	1.7	0.05
RS-496 870-875	88		0.003		1.2	0.04

AMERICAN ASSAY LABORATORIES

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 875-880	51	54	0.001	0.002	0.8	0.02
RS-496 880-885	31		<0.001		0.7	0.02
RS-496 NO#	115		0.003		2.3	0.07
89633	14350		0.418		118.9	3.47

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

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COPIES TO : BRIAN MORRIS

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CLIENT REFERENCE No: RS-496 RECEIVED : 7 APR 2000

No. SAMPLES : 178 REPORTED : 17 APR 2000

MAIN SAMPLE TYPE : DRILL CUTTINGS

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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	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

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AMERICAN ASSAY LABORATORIES

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 000-005	17		<0.001			
RS-496 005-010	29		<0.001			
RS-496 010-015	13		<0.001			
RS-496 015-020	17		<0.001			
RS-496 020-025	<5		<0.001			
RS-496 025-030	14		<0.001			
RS-496 030-035	<5		<0.001			
RS-496 035-040	5		<0.001			
RS-496 040-045	7		<0.001			
RS-496 045-050	17		<0.001			
RS-496 050-055	5		<0.001			
RS-496 055-060	8		<0.001			
RS-496 060-065	10		<0.001			
RS-496 065-070	8	6	<0.001	<0.001		
RS-496 070-075	6		<0.001			
RS-496 075-080	10		<0.001			
RS-496 080-085	<5		<0.001			
RS-496 085-090	67		0.002			
RS-496 090-095	9		<0.001			
RS-496 095-100	32		<0.001			
RS-496 100-105	6		<0.001			
RS-496 105-110	20		<0.001			
RS-496 110-115	50		0.001			
RS-496 115-120	7		<0.001			
RS-496 120-125	7		<0.001			

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 125-130	8		<0.001			
RS-496 130-135	5		<0.001			
RS-496 135-140	11		<0.001			
RS-496 140-145	<5		<0.001			
RS-496 145-150	109	118	0.003	0.003		
RS-496 150-155	44		0.001			
RS-496 155-160	72	69	0.002	0.002		
RS-496 160-165	37		0.001			
RS-496 165-170	57		0.002			
RS-496 170-175	15		<0.001			
RS-496 175-180	<5		<0.001			
RS-496 180-185	6		<0.001			
RS-496 185-190	5		<0.001			
RS-496 190-195	<5		<0.001			
RS-496 195-200	<5	<5	<0.001	<0.001		
RS-496 200-205	<5		<0.001			
RS-496 205-210	<5		<0.001			
RS-496 210-215	<5		<0.001			
RS-496 215-220	<5		<0.001			
RS-496 220-225	<5		<0.001			
RS-496 225-230	<5		<0.001			
RS-496 230-235	<5		<0.001			
RS-496 235-240	63	68	0.002	0.002		
RS-496 240-245	53		0.002			
RS-496 245-250	54		0.002			

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 250-255	72		0.002			
RS-496 255-260	61		0.002			
RS-496 260-265	62		0.002			
RS-496 265-270	93		0.003			
RS-496 270-275	19		<0.001			
RS-496 275-280	76		0.002			
RS-496 280-285	360		0.011			
RS-496 285-290	531		0.015			
RS-496 290-295	677	704	0.020	0.021		
RS-496 295-300	346		0.010			
RS-496 300-305	259		0.008			
RS-496 305-310	195		0.006			
RS-496 310-315	72		0.002			
RS-496 315-320	53		0.002			
RS-496 320-325	210		0.006			
RS-496 325-330	100		0.003			
RS-496 330-335	DTF		DTF			
RS-496 335-340	272		0.008			
RS-496 340-345	181		0.005			
RS-496 345-350	104		0.003			
RS-496 350-355	200		0.006			
RS-496 355-360	355		0.010			
RS-496 360-365	249	260	0.007	0.008		
RS-496 365-370	162		0.005			
RS-496 370-375	226		0.007			

+35.25 20' 1000 = 148.9 149 16225/109

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 17 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 375-380	171		0.005			
RS-496 380-385	108		0.003			
RS-496 385-390	171		0.005			
RS-496 390-395	127		0.004			
RS-496 395-400	150		0.004			
RS-496 400-405	133		0.004			
RS-496 405-410	173		0.005			
RS-496 410-415	134		0.004			
RS-496 415-420	72	68	0.002	0.002		
RS-496 420-425	145		0.004			
RS-496 425-430	90		0.003			
RS-496 430-435	110		0.003			
RS-496 435-440	199		0.006			
RS-496 440-445	336	350	0.010	0.010		
RS-496 445-450	148		0.004			
RS-496 450-455	60		0.002			
RS-496 455-460	109		0.003			
RS-496 460-465	89		0.003			
RS-496 465-470	132		0.004			
RS-496 470-475	144		0.004			
RS-496 475-480	77		0.002			
RS-496 480-485	51		0.001			
RS-496 485-490	58		0.002			
RS-496 490-495	130		0.004			
RS-496 495-500	106		0.003			

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 17 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 500-505	174		0.005			
RS-496 505-510	36		0.001			
RS-496 510-515	75		0.002			
RS-496 515-520	128		0.004			
RS-496 520-525	210		0.006			
RS-496 525-530	264		0.008			
RS-496 530-535	166		0.005			
RS-496 535-540	51		0.001			
RS-496 540-545	178		0.005			
RS-496 545-550	276		0.008			
RS-496 550-555	255		0.007			
RS-496 555-560	239		0.007			
RS-496 560-565	131		0.004			
RS-496 565-570	63		0.002			
RS-496 570-575	73		0.002			
RS-496 575-580	70		0.002			
RS-496 580-585	49		0.001			
RS-496 585-590	26		<0.001			
RS-496 590-595	55		0.002			
RS-496 595-600	140	148	0.004	0.004		
RS-496 600-605	62		0.002			
RS-496 605-610	31		<0.001			
RS-496 610-615	37		0.001			
RS-496 615-620	109		0.003			
RS-496 620-625	145 10,813		0.004			

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 17 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 625-630	25		<0.001			
RS-496 630-635	35		0.001			
RS-496 635-640	29		<0.001			
RS-496 640-645	30		<0.001			
RS-496 645-650	116	126	0.003	0.004		
RS-496 650-655	142		0.004			
RS-496 655-660	108		0.003			
RS-496 660-665	52		0.002			
RS-496 665-670	53		0.002			
RS-496 670-675	114		0.003			
RS-496 675-680	38		0.001			
RS-496 680-685	53		0.002			
RS-496 685-690	106		0.003			
RS-496 690-695	112	104	0.003	0.003		
RS-496 695-700	72		0.002			
RS-496 700-705	117		0.003			
RS-496 705-710	103		0.003			
RS-496 710-715	179		0.005			
RS-496 715-720	190		0.006			
RS-496 720-725	89	100	0.003	0.003		
RS-496 725-730	60		0.002			
RS-496 730-735	175		0.005			
RS-496 735-740	220		0.006			
RS-496 740-745	165		0.005			
RS-496 745-750	152		0.004			

13,348

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 17 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 750-755	178		0.005			
RS-496 755-760	182		0.005			
RS-496 760-765	210		0.006			
RS-496 765-770	154		0.004			
RS-496 770-775	238	226	0.007	0.007		
RS-496 775-780	118		0.003			
RS-496 780-785	410		0.012			
RS-496 785-790	311		0.009			
RS-496 790-795	185		0.005			
RS-496 795-800	191		0.006			
RS-496 800-805	115		SAMPLE NOT RECEIVED			
RS-496 805-810	147		0.004			
RS-496 810-815	93	86	0.003	0.003		
RS-496 815-820	37		0.001			
RS-496 820-825	308	1.6,225	0.009			
RS-496 825-830	47		0.001			
RS-496 830-835	82		0.002			
RS-496 835-840	47		0.001			
RS-496 840-845	48		0.001			
RS-496 845-850	82		0.002			
RS-496 850-855	39		0.001			
RS-496 855-860	19		<0.001			
RS-496 860-865	10		<0.001			
RS-496 865-870	157	155	0.005	0.005		
RS-496 870-875	88		0.003			

825 80 2/5 4.5

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 17 APR 2000

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-496 875-880	51	54	0.001	0.002		
RS-496 880-885	31		<0.001			
RS-496 NO#	115		0.003			
89633	14350		0.419			

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP056908

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: RS-496 RECEIVED : 7 APR 2000

No. SAMPLES : 178 REPORTED : 17 APR 2000

MAIN SAMPLE TYPE : DRILL CUTTINGS

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	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

04/17/2000 11:32 7753561413 AMERICAN ASSAY LABS PAGE 01
7753561413

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 0056908-IN
INVOICE DATE: 05/05/00

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
RS-496	N. EQUINOX	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
178	SAMPLES RECEIVED	.00	.00
1	NO PREPARATION REQUIRED	.00	.00
177	DRY/JAW CRUSH ENTIRE SAMPLE	4.60	814.20
177	ROTARY SPLIT	3.00	531.00
177	RING/PUCK MILL	2.00	354.00
178	Au (1 A.T. FIRE ASSAY)	8.00	1,424.00
178	HYDROCHLORIC/NITRIC DIGESTION	2.00	356.00
178	Ag ANALYSES	1.00	178.00
177	COMPOSITE CHARGE	1.25	221.25
46	MULTI-ELEMENT ICP PACKAGE	13.75	632.50

86-2510-477
KDA

NET INVOICE:	4,510.95
LESS DISCOUNT:	1,578.83
FREIGHT:	.00
INVOICE TOTAL:	2,932.12

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

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: RS-496 RECEIVED : 7 APR 2000

No. SAMPLES : 178 REPORTED : 3 MAY 2000

MAIN SAMPLE TYPE : DRILL CUTTINGS

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	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 000-005	17		<0.001		<0.5	<0.02
RS-496 005-010	29		<0.001		0.9	0.03
RS-496 010-015	13		<0.001		<0.5	<0.02
RS-496 015-020	17		<0.001		<0.5	<0.02
RS-496 020-025	<5		<0.001		<0.5	<0.02
RS-496 025-030	14		<0.001		<0.5	<0.02
RS-496 030-035	<5		<0.001		<0.5	<0.02
RS-496 035-040	5		<0.001		<0.5	<0.02
RS-496 040-045	7		<0.001		<0.5	<0.02
RS-496 045-050	17		<0.001		<0.5	<0.02
RS-496 050-055	5		<0.001		<0.5	<0.02
RS-496 055-060	8		<0.001		<0.5	<0.02
RS-496 060-065	10		<0.001		<0.5	<0.02
RS-496 065-070	8	6	<0.001	<0.001	<0.5	<0.02
RS-496 070-075	6		<0.001		<0.5	<0.02
RS-496 075-080	10		<0.001		<0.5	<0.02
RS-496 080-085	<5		<0.001		<0.5	<0.02
RS-496 085-090	67		0.002		<0.5	<0.02
RS-496 090-095	9		<0.001		<0.5	<0.02
RS-496 095-100	32		<0.001		<0.5	<0.02
RS-496 100-105	6		<0.001		<0.5	<0.02
RS-496 105-110	20		<0.001		<0.5	<0.02
RS-496 110-115	50		0.001		<0.5	<0.02
RS-496 115-120	7		<0.001		<0.5	<0.02
RS-496 120-125	7		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 125-130	8		<0.001		<0.5	<0.02
RS-496 130-135	5		<0.001		<0.5	<0.02
RS-496 135-140	11		<0.001		<0.5	<0.02
RS-496 140-145	<5		<0.001		<0.5	<0.02
RS-496 145-150	109	118	0.003	0.003	<0.5	<0.02
RS-496 150-155	44		0.001		<0.5	<0.02
RS-496 155-160	72	69	0.002	0.002	<0.5	<0.02
RS-496 160-165	37		0.001		<0.5	<0.02
RS-496 165-170	57		0.002		<0.5	<0.02
RS-496 170-175	15		<0.001		<0.5	<0.02
RS-496 175-180	<5		<0.001		<0.5	<0.02
RS-496 180-185	6		<0.001		<0.5	<0.02
RS-496 185-190	5		<0.001		<0.5	<0.02
RS-496 190-195	<5		<0.001		<0.5	<0.02
RS-496 195-200	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-496 200-205	<5		<0.001		<0.5	<0.02
RS-496 205-210	<5		<0.001		<0.5	<0.02
RS-496 210-215	<5		<0.001		<0.5	<0.02
RS-496 215-220	<5		<0.001		<0.5	<0.02
RS-496 220-225	<5		<0.001		<0.5	<0.02
RS-496 225-230	<5		<0.001		<0.5	<0.02
RS-496 230-235	<5		<0.001		<0.5	<0.02
RS-496 235-240	63	68	0.002	0.002	<0.5	<0.02
RS-496 240-245	53		0.002		<0.5	<0.02
RS-496 245-250	54		0.002		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 250-255	72		0.002		<0.5	<0.02
RS-496 255-260	61		0.002		<0.5	<0.02
RS-496 260-265	62		0.002		<0.5	<0.02
RS-496 265-270	93		0.003		<0.5	<0.02
RS-496 270-275	19		<0.001		<0.5	<0.02
RS-496 275-280	76		0.002		<0.5	<0.02
RS-496 280-285	360		0.011		3.2	0.09
RS-496 285-290	531		0.015		3.6	0.11
RS-496 290-295	677	704	0.020	0.021	9.8	0.29
RS-496 295-300	346		0.010		7.7	0.22
RS-496 300-305	259		0.008		2.8	0.08
RS-496 305-310	195		0.006		1.6	0.05
RS-496 310-315	72		0.002		<0.5	<0.02
RS-496 315-320	53		0.002		<0.5	<0.02
RS-496 320-325	210		0.006		<0.5	<0.02
RS-496 325-330	100		0.003		<0.5	<0.02
RS-496 330-335	43		0.001		<0.5	<0.02
RS-496 335-340	272		0.008		<0.5	<0.02
RS-496 340-345	181		0.005		<0.5	<0.02
RS-496 345-350	104		0.003		<0.5	<0.02
RS-496 350-355	200		0.006		<0.5	<0.02
RS-496 355-360	355		0.010		<0.5	<0.02
RS-496 360-365	249	260	0.007	0.008	<0.5	<0.02
RS-496 365-370	162		0.005		<0.5	<0.02
RS-496 370-375	226		0.007		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 375-380	171		0.005		0.6	<0.02
RS-496 380-385	108		0.003		<0.5	<0.02
RS-496 385-390	171		0.005		0.5	<0.02
RS-496 390-395	127		0.004		<0.5	<0.02
RS-496 395-400	150		0.004		<0.5	<0.02
RS-496 400-405	133		0.004		<0.5	<0.02
RS-496 405-410	173		0.005		0.5	<0.02
RS-496 410-415	134		0.004		<0.5	<0.02
RS-496 415-420	72	68	0.002	0.002	1.5	0.04
RS-496 420-425	145		0.004		<0.5	<0.02
RS-496 425-430	90		0.003		0.5	<0.02
RS-496 430-435	110		0.003		<0.5	<0.02
RS-496 435-440	199		0.006		0.6	<0.02
RS-496 440-445	336	350	0.010	0.010	0.9	0.03
RS-496 445-450	148		0.004		<0.5	<0.02
RS-496 450-455	60		0.002		<0.5	<0.02
RS-496 455-460	109		0.003		<0.5	<0.02
RS-496 460-465	89		0.003		<0.5	<0.02
RS-496 465-470	132		0.004		0.6	<0.02
RS-496 470-475	144		0.004		0.6	<0.02
RS-496 475-480	77		0.002		0.5	<0.02
RS-496 480-485	51		0.001		<0.5	<0.02
RS-496 485-490	56		0.002		<0.5	<0.02
RS-496 490-495	130		0.004		<0.5	<0.02
RS-496 495-500	106		0.003		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 500-505	174		0.005		0.6	<0.02
RS-496 505-510	36		0.001		<0.5	<0.02
RS-496 510-515	75		0.002		<0.5	<0.02
RS-496 515-520	128		0.004		0.6	<0.02
RS-496 520-525	210		0.006		1.7	0.05
RS-496 525-530	264		0.008		3.0	0.09
RS-496 530-535	166		0.005		1.5	0.04
RS-496 535-540	51		0.001		0.7	0.02
RS-496 540-545	178		0.005		<0.5	<0.02
RS-496 545-550	276		0.008		1.4	0.04
RS-496 550-555	255		0.007		1.2	0.04
RS-496 555-560	239		0.007		0.7	0.02
RS-496 560-565	131		0.004		0.5	<0.02
RS-496 565-570	63		0.002		<0.5	<0.02
RS-496 570-575	73		0.002		0.5	<0.02
RS-496 575-580	70		0.002		0.6	<0.02
RS-496 580-585	49		0.001		<0.5	<0.02
RS-496 585-590	26		<0.001		<0.5	<0.02
RS-496 590-595	55		0.002		<0.5	<0.02
RS-496 595-600	140	148	0.004	0.004	0.5	<0.02
RS-496 600-605	62		0.002		<0.5	<0.02
RS-496 605-610	31		<0.001		<0.5	<0.02
RS-496 610-615	37		0.001		<0.5	<0.02
RS-496 615-620	109		0.003		<0.5	<0.02
RS-496 620-625	145		0.004		0.6	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 625-630	25		<0.001		<0.5	<0.02
RS-496 630-635	35		0.001		0.5	<0.02
RS-496 635-640	29		<0.001		<0.5	<0.02
RS-496 640-645	30		<0.001		0.5	<0.02
RS-496 645-650	116	126	0.003	0.004	0.6	<0.02
RS-496 650-655	142		0.004		0.6	<0.02
RS-496 655-660	108		0.003		0.8	0.02
RS-496 660-665	52		0.002		0.5	<0.02
RS-496 665-670	53		0.002		0.6	<0.02
RS-496 670-675	114		0.003		0.8	0.02
RS-496 675-680	38		0.001		0.6	<0.02
RS-496 680-685	53		0.002		0.6	<0.02
RS-496 685-690	106		0.003		1.1	0.03
RS-496 690-695	112	104	0.003	0.003	1.1	0.03
RS-496 695-700	72		0.002		0.8	0.02
RS-496 700-705	117		0.003		1.2	0.04
RS-496 705-710	103		0.003		1.1	0.03
RS-496 710-715	179		0.005		1.3	0.04
RS-496 715-720	190		0.006		1.3	0.04
RS-496 720-725	89	100	0.003	0.003	1.0	0.03
RS-496 725-730	60		0.002		0.5	<0.02
RS-496 730-735	175		0.005		1.2	0.04
RS-496 735-740	220		0.006		1.3	0.04
RS-496 740-745	165		0.005		1.2	0.04
RS-496 745-750	152		0.004		1.4	0.04

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 750-755	178		0.005		1.8	0.05
RS-496 755-760	182		0.005		1.5	0.04
RS-496 760-765	210		0.006		2.0	0.06
RS-496 765-770	154		0.004		1.5	0.04
RS-496 770-775	238	226	0.007	0.007	1.2	0.04
RS-496 775-780	118		0.003		0.7	0.02
RS-496 780-785	410		0.012		2.7	0.08
RS-496 785-790	311		0.009		2.4	0.07
RS-496 790-795	185		0.005		2.1	0.06
RS-496 795-800	191		0.006		2.1	0.06
RS-496 800-805			SAMPLE NOT RECEIVED			
RS-496 805-810	147		0.004		1.8	0.05
RS-496 810-815	93	86	0.003	0.003	0.9	0.03
RS-496 815-820	37		0.001		0.7	0.02
RS-496 820-825	308		0.009		<0.5	<0.02
RS-496 825-830	47		0.001		0.6	<0.02
RS-496 830-835	82		0.002		0.6	<0.02
RS-496 835-840	47		0.001		0.5	<0.02
RS-496 840-845	48		0.001		0.5	<0.02
RS-496 845-850	82		0.002		0.9	0.03
RS-496 850-855	39		0.001		0.8	0.02
RS-496 855-860	19		<0.001		0.6	<0.02
RS-496 860-865	10		<0.001		0.5	<0.02
RS-496 865-870	157	155	0.005	0.005	1.7	0.05
RS-496 870-875	88		0.003		1.2	0.04

AMERICAN ASSAY LABORATORIES

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SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 875-880	51	54	0.001	0.002	0.8	0.02
RS-496 880-885	31		<0.001		0.7	0.02
RS-496 NO#	115		0.003		2.3	0.07
89633	14350	13670	0.419	0.398	118.9	3.47

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ANALYSIS REPORT SP056908

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: RS-496 RECEIVED : 7 APR 2000

No. SAMPLES : 178 REPORTED : 3 MAY 2000

MAIN SAMPLE TYPE : DRILL CUTTINGS

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	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 000-005	17		<0.001		<0.5	<0.02
RS-496 005-010	29		<0.001		0.9	0.03
RS-496 010-015	13		<0.001		<0.5	<0.02
RS-496 015-020	17		<0.001		<0.5	<0.02
RS-496 020-025	<5		<0.001		<0.5	<0.02
RS-496 025-030	14		<0.001		<0.5	<0.02
RS-496 030-035	<5		<0.001		<0.5	<0.02
RS-496 035-040	5		<0.001		<0.5	<0.02
RS-496 040-045	7		<0.001		<0.5	<0.02
RS-496 045-050	17		<0.001		<0.5	<0.02
RS-496 050-055	5		<0.001		<0.5	<0.02
RS-496 055-060	8		<0.001		<0.5	<0.02
RS-496 060-065	10		<0.001		<0.5	<0.02
RS-496 065-070	8	6	<0.001	<0.001	<0.5	<0.02
RS-496 070-075	6		<0.001		<0.5	<0.02
RS-496 075-080	10		<0.001		<0.5	<0.02
RS-496 080-085	<5		<0.001		<0.5	<0.02
RS-496 085-090	67		0.002		<0.5	<0.02
RS-496 090-095	9		<0.001		<0.5	<0.02
RS-496 095-100	32		<0.001		<0.5	<0.02
RS-496 100-105	6		<0.001		<0.5	<0.02
RS-496 105-110	20		<0.001		<0.5	<0.02
RS-496 110-115	50		0.001		<0.5	<0.02
RS-496 115-120	7		<0.001		<0.5	<0.02
RS-496 120-125	7		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 125-130	8		<0.001		<0.5	<0.02
RS-496 130-135	5		<0.001		<0.5	<0.02
RS-496 135-140	11		<0.001		<0.5	<0.02
RS-496 140-145	<5		<0.001		<0.5	<0.02
RS-496 145-150	109	118	0.003	0.003	<0.5	<0.02
RS-496 150-155	44		0.001		<0.5	<0.02
RS-496 155-160	72	69	0.002	0.002	<0.5	<0.02
RS-496 160-165	37		0.001		<0.5	<0.02
RS-496 165-170	57		0.002		<0.5	<0.02
RS-496 170-175	15		<0.001		<0.5	<0.02
RS-496 175-180	<5		<0.001		<0.5	<0.02
RS-496 180-185	6		<0.001		<0.5	<0.02
RS-496 185-190	5		<0.001		<0.5	<0.02
RS-496 190-195	<5		<0.001		<0.5	<0.02
RS-496 195-200	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-496 200-205	<5		<0.001		<0.5	<0.02
RS-496 205-210	<5		<0.001		<0.5	<0.02
RS-496 210-215	<5		<0.001		<0.5	<0.02
RS-496 215-220	<5		<0.001		<0.5	<0.02
RS-496 220-225	<5		<0.001		<0.5	<0.02
RS-496 225-230	<5		<0.001		<0.5	<0.02
RS-496 230-235	<5		<0.001		<0.5	<0.02
RS-496 235-240	63	68	0.002	0.002	<0.5	<0.02
RS-496 240-245	53		0.002		<0.5	<0.02
RS-496 245-250	54		0.002		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 250-255	72		0.002		<0.5	<0.02
RS-496 255-260	61		0.002		<0.5	<0.02
RS-496 260-265	62		0.002		<0.5	<0.02
RS-496 265-270	93		0.003		<0.5	<0.02
RS-496 270-275	19		<0.001		<0.5	<0.02
RS-496 275-280	76		0.002		<0.5	<0.02
RS-496 280-285	360		0.011		3.2	0.09
RS-496 285-290	531		0.015		3.6	0.11
RS-496 290-295	677	704	0.020	0.021	9.8	0.29
RS-496 295-300	346		0.010		7.7	0.22
RS-496 300-305	259		0.008		2.8	0.08
RS-496 305-310	195		0.006		1.6	0.05
RS-496 310-315	72		0.002		<0.5	<0.02
RS-496 315-320	53		0.002		<0.5	<0.02
RS-496 320-325	210		0.006		<0.5	<0.02
RS-496 325-330	100		0.003		<0.5	<0.02
RS-496 330-335	43		0.001		<0.5	<0.02
RS-496 335-340	272		0.008		<0.5	<0.02
RS-496 340-345	181		0.005		<0.5	<0.02
RS-496 345-350	104		0.003		<0.5	<0.02
RS-496 350-355	200		0.006		<0.5	<0.02
RS-496 355-360	355		0.010		<0.5	<0.02
RS-496 360-365	249	260	0.007	0.008	<0.5	<0.02
RS-496 365-370	162		0.005		<0.5	<0.02
RS-496 370-375	226		0.007		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

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REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 375-380	171		0.005		0.6	<0.02
RS-496 380-385	108		0.003		<0.5	<0.02
RS-496 385-390	171		0.005		0.5	<0.02
RS-496 390-395	127		0.004		<0.5	<0.02
RS-496 395-400	150		0.004		<0.5	<0.02
RS-496 400-405	133		0.004		<0.5	<0.02
RS-496 405-410	173		0.005		0.5	<0.02
RS-496 410-415	134		0.004		<0.5	<0.02
RS-496 415-420	72	68	0.002	0.002	1.5	0.04
RS-496 420-425	145		0.004		<0.5	<0.02
RS-496 425-430	90		0.003		0.5	<0.02
RS-496 430-435	110		0.003		<0.5	<0.02
RS-496 435-440	199		0.006		0.6	<0.02
RS-496 440-445	336	350	0.010	0.010	0.9	0.03
RS-496 445-450	148		0.004		<0.5	<0.02
RS-496 450-455	60		0.002		<0.5	<0.02
RS-496 455-460	109		0.003		<0.5	<0.02
RS-496 460-465	89		0.003		<0.5	<0.02
RS-496 465-470	132		0.004		0.6	<0.02
RS-496 470-475	144		0.004		0.6	<0.02
RS-496 475-480	77		0.002		0.5	<0.02
RS-496 480-485	51		0.001		<0.5	<0.02
RS-496 485-490	56		0.002		<0.5	<0.02
RS-496 490-495	130		0.004		<0.5	<0.02
RS-496 495-500	106		0.003		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

American Assay Laboratories

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REFERENCE : RS-496

REPORTED : 3 MAY 2000

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 500-505	174		0.005		0.6	<0.02
RS-496 505-510	36		0.001		<0.5	<0.02
RS-496 510-515	75		0.002		<0.5	<0.02
RS-496 515-520	128		0.004		0.6	<0.02
RS-496 520-525	210		0.006		1.7	0.05
RS-496 525-530	264		0.008		3.0	0.09
RS-496 530-535	166		0.005		1.5	0.04
RS-496 535-540	51		0.001		0.7	0.02
RS-496 540-545	178		0.005		<0.5	<0.02
RS-496 545-550	276		0.008		1.4	0.04
RS-496 550-555	255		0.007		1.2	0.04
RS-496 555-560	239		0.007		0.7	0.02
RS-496 560-565	131		0.004		0.5	<0.02
RS-496 565-570	63		0.002		<0.5	<0.02
RS-496 570-575	73		0.002		0.5	<0.02
RS-496 575-580	70		0.002		0.6	<0.02
RS-496 580-585	49		0.001		<0.5	<0.02
RS-496 585-590	26		<0.001		<0.5	<0.02
RS-496 590-595	55		0.002		<0.5	<0.02
RS-496 595-600	140	148	0.004	0.004	0.5	<0.02
RS-496 600-605	62		0.002		<0.5	<0.02
RS-496 605-610	31		<0.001		<0.5	<0.02
RS-496 610-615	37		0.001		<0.5	<0.02
RS-496 615-620	109		0.003		<0.5	<0.02
RS-496 620-625	145		0.004		0.6	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP056908

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SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 625-630	25		<0.001		<0.5	<0.02
RS-496 630-635	35		0.001		0.5	<0.02
RS-496 635-640	29		<0.001		<0.5	<0.02
RS-496 640-645	30		<0.001		0.5	<0.02
RS-496 645-650	116	126	0.003	0.004	0.6	<0.02
RS-496 650-655	142		0.004		0.6	<0.02
RS-496 655-660	108		0.003		0.8	0.02
RS-496 660-665	52		0.002		0.5	<0.02
RS-496 665-670	53		0.002		0.6	<0.02
RS-496 670-675	114		0.003		0.8	0.02
RS-496 675-680	38		0.001		0.6	<0.02
RS-496 680-685	53		0.002		0.6	<0.02
RS-496 685-690	106		0.003		1.1	0.03
RS-496 690-695	112	104	0.003	0.003	1.1	0.03
RS-496 695-700	72		0.002		0.8	0.02
RS-496 700-705	117		0.003		1.2	0.04
RS-496 705-710	103		0.003		1.1	0.03
RS-496 710-715	179		0.005		1.3	0.04
RS-496 715-720	190		0.006		1.3	0.04
RS-496 720-725	89	100	0.003	0.003	1.0	0.03
RS-496 725-730	60		0.002		0.5	<0.02
RS-496 730-735	175		0.005		1.2	0.04
RS-496 735-740	220		0.006		1.3	0.04
RS-496 740-745	165		0.005		1.2	0.04
RS-496 745-750	152		0.004		1.4	0.04

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RS-496 750-755	178		0.005		1.8	0.05
RS-496 755-760	182		0.005		1.5	0.04
RS-496 760-765	210		0.006		2.0	0.06
RS-496 765-770	154		0.004		1.5	0.04
RS-496 770-775	238	226	0.007	0.007	1.2	0.04
RS-496 775-780	118		0.003		0.7	0.02
RS-496 780-785	410		0.012		2.7	0.08
RS-496 785-790	311		0.009		2.4	0.07
RS-496 790-795	185		0.005		2.1	0.06
RS-496 795-800	191		0.006		2.1	0.06
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RS-496 825-830	47		0.001		0.6	<0.02
RS-496 830-835	82		0.002		0.6	<0.02
RS-496 835-840	47		0.001		0.5	<0.02
RS-496 840-845	48		0.001		0.5	<0.02
RS-496 845-850	82		0.002		0.9	0.03
RS-496 850-855	39		0.001		0.8	0.02
RS-496 855-860	19		<0.001		0.6	<0.02
RS-496 860-865	10		<0.001		0.5	<0.02
RS-496 865-870	157	155	0.005	0.005	1.7	0.05
RS-496 870-875	88		0.003		1.2	0.04

AMERICAN ASSAY LABORATORIES

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American Assay Laboratories

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SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-496 875-880	51	54	0.001	0.002	0.8	0.02
RS-496 880-885	31		<0.001		0.7	0.02
RS-496 NO#	115		0.003		2.3	0.07
89633	14350	13670	0.419	0.398	118.9	3.47

AMERICAN ASSAY LABORATORIES
AAL 03-0 ICP PACKAGE DETECTION LIMITS

ELEMENT	Ag	Al	As	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	30	0.01	0.5	3	1	0.1	0.01	.01	1	1	0.2	0.01	0.5	10	0.01	1	0.01	2	0.1	0.01	1	0.001	0.3	0.2	0.4	1	0.2	2	0.01	0.2	5	1	2	1

5.0 GRAMS OF PULP IS DIGESTED WITH HYDROCHLORIC AND NITRIC ACID AT 95 DEGREE CENTIGRADE FOR ONE HOUR.
DIGEST IS PARTIAL FOR Al, B, Ba, Ca, Co, Cr, Fe, K, La, Mg, Mn, Na, Ni, P, Sr, Th, Ti, U, V AND W.
ORGANIC SOLUTION EXTRACTION AND ULTRASONIC ICP FOR Ag, As, Bi, Cd, Cu, Ga, Mo, Pb, Sb, Se, Te AND Tl.
Hg BY COLD VAPOR AAS.

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56908
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-496 000-020	305	1.01	7.1	11.9	9	66.00	0.19	0.44	0.15	3.10	5.1	9.23	2.55	6.1	353	0.09	17.3	0.07	564	2.32	0.116	2.2	0.012	43.25	0.04	1.96	2.5	0.5	80.5	0.06	12.4	0.005	0.2	1.9	33	0.4	55.2
RS-496 020-040	258	0.73	7.6	10.6	4	93.50	0.04	1.8	0.44	2.40	2.8	5.21	1.74	6	45	0.1	26.5	0.08	1074	2.63	0.043	1.6	0.01	17.26	< .01	0.49	2	0.1	43.9	0.02	13.6	0.005	0.07	2.1	7	0.7	65.5
RS-496 040-060	96	0.63	4.3	1.5	3	130.10	0.03	1.59	0.44	1.20	2	3.93	1.77	5.6	30	0.09	26.2	0.08	1620	2.59	0.026	1	0.008	15.46	0.02	0.82	1.6	0.1	51.2	< .02	13.7	0.006	0.12	1.5	7	1	62.9
RS-496 060-080	47	0.60	2.7	1.7	1	48.50	0.04	1.57	0.3	1.10	2.9	3.35	1.73	5.1	12	0.09	24.6	0.08	769	2.25	0.025	0.7	0.007	12.2	< .01	0.42	1.4	0.1	33.5	< .02	13	0.006	0.04	1.4	6	0.8	54.1
RS-496 080-100	63	0.51	14.2	9.1	2	45.90	0.02	1.13	0.34	0.90	2.7	3.32	1.76	4.4	71	0.09	25	0.06	933	2.73	0.019	1.1	0.009	14.15	< .01	3.3	1.4	0.4	37.1	< .02	13.1	0.005	0.08	1.6	8	1	53.3
RS-496 100-120	114	0.54	18.5	19.7	< 1	156.30	< .02	0.25	0.25	1.40	1.4	5.56	1.83	4.1	314	0.09	27.2	0.05	1793	3.21	0.018	1.3	0.008	11.45	0.01	6.93	1.2	1	45.5	< .02	13.3	0.003	0.64	1.8	5	0.8	84
RS-496 120-140	58	0.53	15.3	8.5	2	84.20	0.03	0.21	0.18	0.90	1	4.87	1.86	3.9	212	0.09	23.1	0.04	1342	2.88	0.015	1.3	0.008	11.63	< .01	6.21	1.2	0.6	27.5	< .02	11.7	0.005	0.22	1.4	6	1.1	68.3
RS-496 140-160	52	0.48	19.0	38.6	3.0	50.10	0.05	0.12	0.03	0.30	1.6	4	2.02	3.1	51	0.08	24.7	0.02	236	2.02	0.011	0.9	0.007	8.45	0.02	10.35	1	0.8	35.6	< .02	13.3	0.005	0.07	1.3	4	1.4	23.3
RS-496 160-180	56	0.63	26.5	20.9	5	340.00	< .02	0.1	0.01	0.30	0.9	3.2	2.39	3.1	25	0.07	23.4	0.01	35	2.68	0.012	1.1	0.007	8.75	0.04	11.67	1	0.5	50.8	< .02	13.5	0.003	0.03	1.3	5	4.1	19.8
RS-496 180-200	27	0.42	10.7	6.1	3	317.60	< .02	0.13	0.04	0.50	0.6	3.08	2.4	3	52	0.08	26.7	0.02	889	2.14	0.013	0.8	0.009	9.83	0.01	4.9	1.1	0.2	40.8	< .02	14.5	0.006	0.59	1.5	5	3.5	36.6
RS-496 200-220	41	0.89	16.8	3.5	5	905.70	< .02	0.08	0.02	0.30	0.9	2.67	2.49	3.8	84	0.06	28.4	0.01	224	1.89	0.01	0.8	0.009	11.59	0.03	11.68	0.8	0.2	49.2	< .02	15.9	0.004	0.13	1.8	3	3.3	13.2
RS-496 220-240	36	0.67	34.2	10.4	3	1117.80	< .02	0.06	0.02	0.50	1.7	4.45	4.17	5.6	279	0.02	24.3	0.01	631	3.58	0.006	2.6	0.007	15.58	0.03	32.22	0.5	1	38.2	< .02	14.9	0.006	0.2	1.8	4	39.4	15
RS-496 240-260	98	0.68	29.4	68.8	3	620.20	0.02	0.03	0.01	0.40	3.2	4.59	1.83	4.1	232	0.01	14.3	< .01	738	3.27	0.004	1.6	0.007	17.19	0.02	28.28	0.4	2.1	73.2	0.02	8	0.004	0.09	1.1	4	32	6.7
RS-496 260-280	121	0.63	21.0	54.6	2	570.20	< .02	0.02	0.01	0.50	2.5	6.47	0.79	6.2	436	0.01	10.9	< .01	1779	5.15	0.003	2.1	0.006	13.95	0.03	14.82	0.3	2.6	84	< .02	3.8	0.002	0.23	0.6	5	8.8	8.3
RS-496 280-300	5994	0.46	73.2	238	4	976.60	< .02	0.03	0.23	2.00	18.1	37.88	4.09	3.7	6258	0.02	10.9	< .01	4925	12.87	0.005	13.6	0.009	15.91	0.04	43.4	0.2	2.3	208.2	0.03	2.8	0.004	1.24	1.1	16	16.3	33.1
RS-496 300-320	1182	1.11	28.7	79.3	3	615.20	< .02	0.03	0.1	1.50	9.6	26.05	2.63	4.4	6814	0.05	13	< .01	4822	10.84	0.01	7.6	0.006	18.91	0.07	19.97	0.5	11.5	106.1	0.03	4.5	0.002	0.79	0.6	9	4.9	15.2
RS-496 320-340	178	1.16	108.1	145.1	< 1	885.40	0.03	0.08	0.04	1.80	1.3	21.75	3.22	6	8312	0.12	10.3	0.02	19705	22.03	0.02	66.2	0.011	33.37	0.2	52.12	0.2	28.6	234.7	< .02	5.4	0.002	4.28	0.7	7	7.7	29.8
RS-496 340-360	141	0.81	88.4	211.5	5	169.70	0.04	0.05	0.06	4.50	2.5	6.71	5	2.1	2676	0.05	10.2	< .01	5094	9.08	0.012	1.8	0.015	28.85	1.08	29.34	0.8	55.4	122	0.03	13.2	0.002	1.59	2.1	2	1.6	29.8
RS-496 360-380	275	0.81	69.4	197.1	3	29.50	0.04	0.05	1.94	8.90	3.9	10.33	5.94	2.2	2441	0.06	13.3	< .01	238	3.96	0.015	4.6	0.013	41.62	5.17	35.98	1.3	40.2	85.5	0.02	14.5	0.001	3.99	9.6	4	1.4	99.6
RS-496 380-400	384	0.97	39.2	112.8	7	49.20	0.03	0.03	0.18	1.90	8.8	20.54	4.13	4	1222	0.19	21.3	0.01	195	4.2	0.022	6	0.009	23.49	3.27	19.3	0.9	12.6	17.2	< .02	10.7	0.002	1.48	2.2	7	0.8	112.4
RS-496 400-420	322	0.67	17.0	98.7	4	79.40	0.02	0.05	0.16	1.60	4.6	12.87	2.84	3.1	914	0.15	24.2	0.01	105	2.77	0.015	3.7	0.012	20.44	2.08	10.01	0.7	9.2	6.6	< .02	11.6	0.002	0.59	1.9	5	0.7	105.8
RS-496 420-440	466	0.4	30.7	91.9	1	50.90	0.03	0.05	0.18	1.60	5.5	17.86	2.89	2.3	1178	0.13	20.3	0.01	120	3.76	0.016	3.6	0.012	17.68	1.81	15.67	0.6	12.1	6.4	< .02	9.9	0.001	0.68	1.8	4	0.6	115.9
RS-496 440-460	478	0.53	22.8	123.5	4	32.80	0.02	0.1	0.15	1.50	5.3	15.25	3.06	3.4	738	0.14	21.5	0.02	113	3.7	0.018	3.3	0.013	30.26	2.27	12.24	0.9	13	9.4	< .02	10.4	0.001	0.98	1.6	4	0.6	118.3
RS-496 460-480	473	0.49	16.5	107.7	1	30.70	0.03	0.08	0.19	1.40	4.1	12.29	2.89	3.1	798	0.13	21.3	0.02	119	3.47	0.014	2.7	0.01	23.25	2.35	17.17	0.9	9.3	7.9	< .02	11.3	0.001	1.08	2.4	3	0.5	159.1
RS-496 480-500	202	0.49	6.0	56.7	3	68.80	0.03	0.05	0.08	0.90	2	10.58	2.68	2.6	395	0.12	23.4	0.01	93	3.05	0.012	2.2	0.011	21.98	1.88	11.76	0.7	3.5	5.9	< .02	12.1	0.004	0.47	2	3	1	123.2
RS-496 500-520	350	0.54	14.0	79.4	4	81.40	< .02	0.05	0.14	1.00	3.1	8.42	2.54	2.5	593	0.11	20.3	0.01	66	3.22	0.008	1.8	0.012	23.68	2.22	13.81	0.9	5.7	5	< .02	10.3	0.001	0.73	2.2	2	0.4	124.9
RS-496 520-540	1747	0.46	177.8	148.4	4	36.20	0.03	0.07	0.2	2.30	2.8	11.03	4.8	2.8	2118	0.14	21.1	0.02	107	7.75	0.011	2.9	0.024	28.42	4.46	70.91	0.8	28.9	5.7	< .02	9	0.008	3.75	2.8	5	0.9	165.2
RS-496 540-560	1013	0.38	152.2	213.6	3	39.10	0.04	0.09	0.23	2.30	6.1	17.09	4.64	2.6	2117	0.14	21.5	0.02	123	6.17	0.012	3.8	0.028	22.04	4.21	54.19	0.6	33.7	6.7	< .02	9.2	0.003	2.49	6	7	0.7	403.8
RS-496 560-580	448	0.48	50.9	65.4	5	98.40	0.03	0.09	0.16	2.00	5.3	13.67	3.62	3.5	698	0.13	24.8	0.02	775	4.38	0.014	3.2	0.025	20.25	1.51	22.52	1.1	11.5	10.1	< .02	10.9	0.021	0.97	2	6	3.8	170.4
RS-496 580-600	286	0.46	21.9	45.5	3.0	77.40	0.0	0.14	0.12	1.70	4.2	11.06	3.09	3.7	486	0.12	24.6	0.04	390	3.63	0.016	2.8	0.026	16.35	1.31	10.22	1	6.8	12.7	< .02	11.3	0.015	0.76	2	6	2.4	144
RS-496 600-620	270	0.54	23.4	41.9	1	92.1	0.02	0.14	0.13	1.6	3.5	10.74	2.95	3.9	445	0.13	23.8	0.04	637	3.27	0.018	2.4	0.026	11.46	0.97	12.62	1.1	6	13.6	< .02	11	0.015	0.62	1.4	6	2.9	127.2
RS-496 620-640	417	0.55	18	55.1	6	95.4	0.03	0.09	0.14	1.8	4.7	11.93	3.28	3.5	495	0.17	26.6	0.05	396	3.43	0.015	2.9	0.028	18.41	1.73	13.01	0.9	4.6	10.6	< .02	11.9	0.019	0.71	1.7	6	3.1	142.1
RS-496 640-660	461	0.56	36.1	60.7	2	73	0.04	0.07	0.2	2	5.2	14.97	3.85	3.1	956	0.22	24.7	0.04	735	4.5	0.014	4.3	0.027	19.25	2.81	26.49	0.8	9.6	17.4	< .02	10.6	0.007	0.88	2.1	6	3.3	111.9
STANDARD DS2	257	1.7	57	184.7	5	145	10.52	0.53	9.92	11.4	153.1	120.52	2.97	6.2	214	0.16	16.3	0.58	790	13.31	0.032	34.1	0.086	32.04	0.03	8.16	2.6	2.2	30.4	1.77	3.5	0.094	1.83	18.8	72	6.3	156.3
RS-496 660-680	314	1.08	21.1	41.4	< 1	200.9	0.19	2.25	0.48	2.1	9.3	13.35	2.54	3.9	751	0.22	26.4	0.14	2144	3.48	0.014	3.3	0.047	17.31	1.38	5.88	1.5	4	107.9	< .02	6.2	0.004	0.57	1.5	7	1	76.4

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56908
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-496 680-700	567	0.82	25.2	57.9	< 1	127.4	0.16	1.25	0.25	2.6	7.4	13.56	2.81	4.9	511	0.22	24.4	0.12	1155	3.13	0.013	3.4	0.048	13.88	2.16	9.27	1.1	7.6	57.7	< .02	5.9	0.005	0.63	1.5	8	1	73.1
RS-496 700-720	855	0.87	59.3	116.5	< 1	81.8	0.08	0.88	0.21	4.6	6.2	9.19	3.32	5.2	879	0.21	20.5	0.14	840	3.32	0.014	2.6	0.075	10.84	3.67	19.24	1.3	10.4	50.1	< .02	5.3	0.007	1.87	1.9	9	1.2	81.5
RS-496 720-740	546	1.19	26.3	109.6	1	99.4	0.09	0.66	0.17	4.5	4.7	9.48	2.67	6.8	728	0.3	23.4	0.2	571	2.75	0.015	2.9	0.078	11.55	2.42	11.06	1.5	6	45.8	< .02	6.3	0.012	1.19	2.1	13	0.9	74.7
RS-496 740-760	1056	1.03	42.5	120.7	< 1	82.2	0.07	0.65	0.18	4.6	9	13.52	3.42	5.4	1302	0.21	22.3	0.13	579	3.51	0.011	3.8	0.071	15.11	3.42	16.75	1.1	10.2	48.4	< .02	6	0.006	1.79	1.7	10	1	85.4
RS-496 760-780	933	0.96	52.7	151.7	< 1	55	0.1	0.55	0.12	4.8	5.8	9.68	2.92	5.8	1013	0.27	24.6	0.12	272	2.83	0.012	2.6	0.089	14.16	3.42	19.35	1.4	11.2	35	< .02	6.3	0.006	1.51	2	9	0.4	73.2
RS-496 780-800	2073	0.67	186.9	203.6	1	26.2	0.17	0.22	0.15	4.3	8.1	22.79	4.15	5.7	2980	0.08	19.3	0.03	178	64.59	0.005	6.8	0.053	19.8	3.61	24.79	0.6	9.2	11.6	< .02	4.7	0.002	1.76	12.6	8	0.4	79
RS-496 805-820	780	1.01	44.7	61.2	< 1	54	0.07	0.78	0.17	1.1	6.7	12.44	2.99	5.1	755	0.2	18.6	0.08	601	16.31	0.017	2.5	0.028	14.79	1.94	11.25	0.9	6.9	28.7	< .02	6.3	0.007	0.77	7.6	3	0.2	64.9
RS-496 820-840	336	1.05	21.1	32.7	< 1	71.4	0.05	0.75	0.1	1.2	4.3	17.45	2.84	5	326	0.2	22.9	0.1	1183	6.37	0.02	1.6	0.032	12.91	1.72	8.56	1.1	3.9	31.9	< .02	7.9	0.007	0.46	2.7	2	0.5	85.5
RS-496 840-860	428	1.03	27	35	< 1	134.7	0.05	1.46	0.12	1.2	3.6	9.1	2.82	5.2	515	0.19	23.5	0.12	1092	8.32	0.021	1.8	0.03	11.14	0.85	5.95	1.2	3.1	57.6	< .02	8.5	0.009	0.44	3.2	2	1.6	74.4
RS-496 860-880	563	1.28	47.9	65.9	< 1	112	0.05	1.35	0.12	1.8	6	9.58	2.97	6.1	738	0.21	21.6	0.13	999	13.46	0.021	2.3	0.032	13.47	1.43	7.87	1.3	7.6	53.8	< .02	7.3	0.007	0.6	3.1	2	1.1	82.4
RS-496 880-885	249	0.96	19.1	22.9	< 1	56.7	0.02	1.39	0.07	1.3	4.9	10.63	2.71	4.9	301	0.19	21.7	0.11	1379	6.23	0.03	3.5	0.029	9.18	1.23	4.48	1.1	14.1	51.7	< .02	7.9	0.005	0.26	1.5	2	0.2	91.8
RS-496 NO#	1402	0.79	89.5	93.2	< 1	48.1	0.1	0.12	0.22	2	10.1	19.19	3.1	4.8	1447	0.11	15.4	0.02	151	32.92	0.006	8	0.029	17.56	2.27	14.69	0.5	11	7	< .02	4.4	0.002	1.2	26.7	7	0.5	65.3
89633 empty	< 2	< .01	< .1	< .2	< 1	< .5	< .02	< .01	< .01	< .1	< .5	< .01	< .01	< .1	< 5	< .01	< .5	< .01	< 1	< .01	< .001	< .1	< .001	< .01	< .01	< .02	< .1	< .1	< .5	< .02	< .1	< .001	< .02	< .1	< 2	< .2	< .1
STANDARD DS2	253	1.77	58	209.5	2	153.3	10.92	0.55	10.44	11.7	159.4	128.57	3.16	6.1	222	0.17	16.2	0.61	850	14.2	0.033	36.4	0.092	33.02	0.03	8.44	2.8	2.3	29.6	1.74	3.6	0.096	1.82	18.9	76	6.5	165

AMERICAN ASSAY LABORATORIES
AAL 03-0 ICP PACKAGE DETECTION LIMITS

ELEMENT	Ag	Al	As	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	30	0.01	0.5	3	1	0.1	0.01	.01	1	1	0.2	0.01	0.5	10	0.01	1	0.01	2	0.1	0.01	1	0.001	0.3	0.2	0.4	1	0.2	2	0.01	0.2	5	1	2	1

5.0 GRAMS OF PULP IS DIGESTED WITH HYDROCHLORIC AND NITRIC ACID AT 95 DEGREE CENTIGRADE FOR ONE HOUR.
DIGEST IS PARTIAL FOR Al, B, Ba, Ca, Co, Cr, Fe, K, La, Mg, Mn, Na, Ni, P, Sr, Th, Ti, U, V AND W.
ORGANIC SOLUTION EXTRACTION AND ULTRASONIC ICP FOR Ag, As, Bi, Cd, Cu, Ga, Mo, Pb, Sb, Se, Te AND Tl.
Hg BY COLD VAPOR AAS.

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56908
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-496 000-020	305	1.01	7.1	11.9	9	66.00	0.19	0.44	0.15	3.10	5.1	9.23	2.55	6.1	353	0.09	17.3	0.07	564	2.32	0.116	2.2	0.012	43.25	0.04	1.96	2.5	0.5	80.5	0.06	12.4	0.005	0.2	1.9	33	0.4	55.2
RS-496 020-040	258	0.73	7.6	10.6	4	93.50	0.04	1.8	0.44	2.40	2.8	5.21	1.74	6	45	0.1	26.5	0.08	1074	2.63	0.043	1.6	0.01	17.26	< .01	0.49	2	0.1	43.9	0.02	13.6	0.005	0.07	2.1	7	0.7	65.5
RS-496 040-060	96	0.63	4.3	1.5	3	130.10	0.03	1.59	0.44	1.20	2	3.93	1.77	5.6	30	0.09	26.2	0.08	1620	2.59	0.026	1	0.008	15.46	0.02	0.82	1.6	0.1	51.2	< .02	13.7	0.006	0.12	1.5	7	1	62.9
RS-496 060-080	47	0.60	2.7	1.7	1	48.50	0.04	1.57	0.3	1.10	2.9	3.35	1.73	5.1	12	0.09	24.6	0.08	769	2.25	0.025	0.7	0.007	12.2	< .01	0.42	1.4	0.1	33.5	< .02	13	0.006	0.04	1.4	6	0.8	54.1
RS-496 080-100	63	0.51	14.2	9.1	2	45.90	0.02	1.13	0.34	0.90	2.7	3.32	1.76	4.4	71	0.09	25	0.06	933	2.73	0.019	1.1	0.009	14.15	< .01	3.3	1.4	0.4	37.1	< .02	13.1	0.005	0.08	1.6	8	1	53.3
RS-496 100-120	114	0.54	18.5	19.7	< 1	156.30	< .02	0.25	0.25	1.40	1.4	5.56	1.83	4.1	314	0.09	27.2	0.05	1793	3.21	0.018	1.3	0.008	11.45	0.01	6.93	1.2	1	45.5	< .02	13.3	0.003	0.64	1.8	5	0.8	84
RS-496 120-140	58	0.53	15.3	8.5	2	84.20	0.03	0.21	0.18	0.90	1	4.87	1.86	3.9	212	0.09	23.1	0.04	1342	2.88	0.015	1.3	0.008	11.63	< .01	6.21	1.2	0.6	27.5	< .02	11.7	0.005	0.22	1.4	6	1.1	68.3
RS-496 140-160	52	0.48	19.0	38.6	3.0	50.10	0.05	0.12	0.03	0.30	1.6	4	2.02	3.1	51	0.08	24.7	0.02	236	2.02	0.011	0.9	0.007	8.45	0.02	10.35	1	0.8	35.6	< .02	13.3	0.005	0.07	1.3	4	1.4	23.3
RS-496 160-180	56	0.63	26.5	20.9	5	340.00	< .02	0.1	0.01	0.30	0.9	3.2	2.39	3.1	25	0.07	23.4	0.01	35	2.68	0.012	1.1	0.007	8.75	0.04	11.67	1	0.5	50.8	< .02	13.5	0.003	0.03	1.3	5	4.1	19.8
RS-496 180-200	27	0.42	10.7	6.1	3	317.60	< .02	0.13	0.04	0.50	0.6	3.08	2.4	3	52	0.08	26.7	0.02	889	2.14	0.013	0.8	0.009	9.83	0.01	4.9	1.1	0.2	40.8	< .02	14.5	0.006	0.59	1.5	5	3.5	36.6
RS-496 200-220	41	0.89	16.8	3.5	5	905.70	< .02	0.08	0.02	0.30	0.9	2.67	2.49	3.8	84	0.06	28.4	0.01	224	1.89	0.01	0.8	0.009	11.59	0.03	11.68	0.8	0.2	49.2	< .02	15.9	0.004	0.13	1.8	3	3.3	13.2
RS-496 220-240	36	0.67	34.2	10.4	3	1117.80	< .02	0.06	0.02	0.50	1.7	4.45	4.17	5.6	279	0.02	24.3	0.01	631	3.58	0.006	2.6	0.007	15.58	0.03	32.22	0.5	1	38.2	< .02	14.9	0.006	0.2	1.8	4	39.4	15
RS-496 240-260	98	0.68	29.4	68.8	3	620.20	0.02	0.03	0.01	0.40	3.2	4.59	1.83	4.1	232	0.01	14.3	< .01	738	3.27	0.004	1.6	0.007	17.19	0.02	28.28	0.4	2.1	73.2	0.02	8	0.004	0.09	1.1	4	32	6.7
RS-496 260-280	121	0.63	21.0	54.6	2	570.20	< .02	0.02	0.01	0.50	2.5	6.47	0.79	6.2	436	0.01	10.9	< .01	1779	5.15	0.003	2.1	0.006	13.95	0.03	14.82	0.3	2.6	84	< .02	3.8	0.002	0.23	0.6	5	8.8	8.3
RS-496 280-300	5994	0.46	73.2	238	4	976.60	< .02	0.03	0.23	2.00	18.1	37.88	4.09	3.7	6258	0.02	10.9	< .01	4925	12.87	0.005	13.6	0.009	15.91	0.04	43.4	0.2	2.3	208.2	0.03	2.8	0.004	1.24	1.1	16	16.3	33.1
RS-496 300-320	1182	1.11	28.7	79.3	3	615.20	< .02	0.03	0.1	1.50	9.6	26.05	2.63	4.4	6814	0.05	13	< .01	4822	10.84	0.01	7.6	0.006	18.91	0.07	19.97	0.5	11.5	106.1	0.03	4.5	0.002	0.79	0.6	9	4.9	15.2
RS-496 320-340	178	1.16	108.1	145.1	< 1	885.40	0.03	0.08	0.04	1.80	1.3	21.75	3.22	6	8312	0.12	10.3	0.02	19705	22.03	0.02	66.2	0.011	33.37	0.2	52.12	0.2	28.6	234.7	< .02	5.4	0.002	4.28	0.7	7	7.7	29.8
RS-496 340-360	141	0.81	88.4	211.5	5	169.70	0.04	0.05	0.06	4.50	2.5	6.71	5	2.1	2676	0.05	10.2	< .01	5094	9.08	0.012	1.8	0.015	28.85	1.08	29.34	0.8	55.4	122	0.03	13.2	0.002	1.59	2.1	2	1.6	29.8
RS-496 360-380	275	0.81	69.4	197.1	3	29.50	0.04	0.05	1.94	8.90	3.9	10.33	5.94	2.2	2441	0.06	13.3	< .01	238	3.96	0.015	4.6	0.013	41.62	5.17	35.98	1.3	40.2	85.5	0.02	14.5	0.001	3.99	9.6	4	1.4	99.6
RS-496 380-400	384	0.97	39.2	112.8	7	49.20	0.03	0.03	0.18	1.90	8.8	20.54	4.13	4	1222	0.19	21.3	0.01	195	4.2	0.022	6	0.009	23.49	3.27	19.3	0.9	12.6	17.2	< .02	10.7	0.002	1.48	2.2	7	0.8	112.4
RS-496 400-420	322	0.67	17.0	98.7	4	79.40	0.02	0.05	0.16	1.60	4.6	12.87	2.84	3.1	914	0.15	24.2	0.01	105	2.77	0.015	3.7	0.012	20.44	2.08	10.01	0.7	9.2	6.6	< .02	11.6	0.002	0.59	1.9	5	0.7	105.8
RS-496 420-440	466	0.4	30.7	91.9	1	50.90	0.03	0.05	0.18	1.60	5.5	17.86	2.89	2.3	1178	0.13	20.3	0.01	120	3.76	0.016	3.6	0.012	17.68	1.81	15.67	0.6	12.1	6.4	< .02	9.9	0.001	0.68	1.8	4	0.6	115.9
RS-496 440-460	478	0.53	22.8	123.5	4	32.80	0.02	0.1	0.15	1.50	5.3	15.25	3.06	3.4	738	0.14	21.5	0.02	113	3.7	0.018	3.3	0.013	30.26	2.27	12.24	0.9	13	9.4	< .02	10.4	0.001	0.98	1.6	4	0.6	118.3
RS-496 460-480	473	0.49	16.5	107.7	1	30.70	0.03	0.08	0.19	1.40	4.1	12.29	2.89	3.1	798	0.13	21.3	0.02	119	3.47	0.014	2.7	0.01	23.25	2.35	17.17	0.9	9.3	7.9	< .02	11.3	0.001	1.08	2.4	3	0.5	159.1
RS-496 480-500	202	0.49	6.0	56.7	3	68.80	0.03	0.05	0.08	0.90	2	10.58	2.68	2.6	395	0.12	23.4	0.01	93	3.05	0.012	2.2	0.011	21.98	1.88	11.76	0.7	3.5	5.9	< .02	12.1	0.004	0.47	2	3	1	123.2
RS-496 500-520	350	0.54	14.0	79.4	4	81.40	< .02	0.05	0.14	1.00	3.1	8.42	2.54	2.5	593	0.11	20.3	0.01	66	3.22	0.008	1.8	0.012	23.68	2.22	13.81	0.9	5.7	5	< .02	10.3	0.001	0.73	2.2	2	0.4	124.9
RS-496 520-540	1747	0.46	177.8	148.4	4	36.20	0.03	0.07	0.2	2.30	2.8	11.03	4.8	2.8	2118	0.14	21.1	0.02	107	7.75	0.011	2.9	0.024	28.42	4.46	70.91	0.8	28.9	5.7	< .02	9	0.008	3.75	2.8	5	0.9	165.2
RS-496 540-560	1013	0.38	152.2	213.6	3	39.10	0.04	0.09	0.23	2.30	6.1	17.09	4.64	2.6	2117	0.14	21.5	0.02	123	6.17	0.012	3.8	0.028	22.04	4.21	54.19	0.6	33.7	6.7	< .02	9.2	0.003	2.49	6	7	0.7	403.8
RS-496 560-580	448	0.48	50.9	65.4	5	98.40	0.03	0.09	0.16	2.00	5.3	13.67	3.62	3.5	698	0.13	24.8	0.02	775	4.38	0.014	3.2	0.025	20.25	1.51	22.52	1.1	11.5	10.1	< .02	10.9	0.021	0.97	2	6	3.8	170.4
RS-496 580-600	286	0.46	21.9	45.5	3.0	77.40	0.0	0.14	0.12	1.70	4.2	11.06	3.09	3.7	486	0.12	24.6	0.04	390	3.63	0.016	2.8	0.026	16.35	1.31	10.22	1	6.8	12.7	< .02	11.3	0.015	0.76	2	6	2.4	144
RS-496 600-620	270	0.54	23.4	41.9	1	92.1	0.02	0.14	0.13	1.6	3.5	10.74	2.95	3.9	445	0.13	23.8	0.04	637	3.27	0.018	2.4	0.026	11.46	0.97	12.62	1.1	6	13.6	< .02	11	0.015	0.62	1.4	6	2.9	127.2
RS-496 620-640	417	0.55	18	55.1	6	95.4	0.03	0.09	0.14	1.8	4.7	11.93	3.28	3.5	495	0.17	26.6	0.05	396	3.43	0.015	2.9	0.028	18.41	1.73	13.01	0.9	4.6	10.6	< .02	11.9	0.019	0.71	1.7	6	3.1	142.1
RS-496 640-660	461	0.56	36.1	60.7	2	73	0.04	0.07	0.2	2	5.2	14.97	3.85	3.1	956	0.22	24.7	0.04	735	4.5	0.014	4.3	0.027	19.25	2.81	26.49	0.8	9.6	17.4	< .02	10.6	0.007	0.88	2.1	6	3.3	111.9
STANDARD DS2	257	1.7	57	184.7	5	145	10.52	0.53	9.92	11.4	153.1	120.52	2.97	6.2	214	0.16	16.3	0.58	790	13.31	0.032	34.1	0.086	32.04	0.03	8.16	2.6	2.2	30.4	1.77	3.5	0.094	1.83	18.8	72	6.3	156.3
RS-496 660-680	314	1.08	21.1	41.4	< 1	200.9	0.19	2.25	0.48	2.1	9.3	13.35	2.54	3.9	751	0.22	26.4	0.14	2144	3.48	0.014	3.3	0.047	17.31	1.38	5.88	1.5	4	107.9	< .02	6.2	0.004	0.57	1.5	7	1	76.4

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT:	HECLA MINING CO.
CLIENT REF:	KURT ALLEN
AAL REF:	SP56908
METHOD:	AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-496 680-700	567	0.82	25.2	57.9	< 1	127.4	0.16	1.25	0.25	2.6	7.4	13.56	2.81	4.9	511	0.22	24.4	0.12	1155	3.13	0.013	3.4	0.048	13.88	2.16	9.27	1.1	7.6	57.7	< .02	5.9	0.005	0.63	1.5	8	1	73.1
RS-496 700-720	855	0.87	59.3	116.5	< 1	81.8	0.08	0.88	0.21	4.6	6.2	9.19	3.32	5.2	879	0.21	20.5	0.14	840	3.32	0.014	2.6	0.075	10.84	3.67	19.24	1.3	10.4	50.1	< .02	5.3	0.007	1.87	1.9	9	1.2	81.5
RS-496 720-740	546	1.19	26.3	109.6	1	99.4	0.09	0.66	0.17	4.5	4.7	9.48	2.67	6.8	728	0.3	23.4	0.2	571	2.75	0.015	2.9	0.078	11.55	2.42	11.06	1.5	6	45.8	< .02	6.3	0.012	1.19	2.1	13	0.9	74.7
RS-496 740-760	1056	1.03	42.5	120.7	< 1	82.2	0.07	0.65	0.18	4.6	9	13.52	3.42	5.4	1302	0.21	22.3	0.13	579	3.51	0.011	3.8	0.071	15.11	3.42	16.75	1.1	10.2	48.4	< .02	6	0.006	1.79	1.7	10	1	85.4
RS-496 760-780	933	0.96	52.7	151.7	< 1	55	0.1	0.55	0.12	4.8	5.8	9.68	2.92	5.8	1013	0.27	24.6	0.12	272	2.83	0.012	2.6	0.089	14.16	3.42	19.35	1.4	11.2	35	< .02	6.3	0.006	1.51	2	9	0.4	73.2
RS-496 780-800	2073	0.67	186.9	203.6	1	26.2	0.17	0.22	0.15	4.3	8.1	22.79	4.15	5.7	2980	0.08	19.3	0.03	178	64.59	0.005	6.8	0.053	19.8	3.61	24.79	0.6	9.2	11.6	< .02	4.7	0.002	1.76	12.6	8	0.4	79
RS-496 805-820	780	1.01	44.7	61.2	< 1	54	0.07	0.78	0.17	1.1	6.7	12.44	2.99	5.1	755	0.2	18.6	0.08	601	16.31	0.017	2.5	0.028	14.79	1.94	11.25	0.9	6.9	28.7	< .02	6.3	0.007	0.77	7.6	3	0.2	64.9
RS-496 820-840	336	1.05	21.1	32.7	< 1	71.4	0.05	0.75	0.1	1.2	4.3	17.45	2.84	5	326	0.2	22.9	0.1	1183	6.37	0.02	1.6	0.032	12.91	1.72	8.56	1.1	3.9	31.9	< .02	7.9	0.007	0.46	2.7	2	0.5	85.5
RS-496 840-860	428	1.03	27	35	< 1	134.7	0.05	1.46	0.12	1.2	3.6	9.1	2.82	5.2	515	0.19	23.5	0.12	1092	8.32	0.021	1.8	0.03	11.14	0.85	5.95	1.2	3.1	57.6	< .02	8.5	0.009	0.44	3.2	2	1.6	74.4
RS-496 860-880	563	1.28	47.9	65.9	< 1	112	0.05	1.35	0.12	1.8	6	9.58	2.97	6.1	738	0.21	21.6	0.13	999	13.46	0.021	2.3	0.032	13.47	1.43	7.87	1.3	7.6	53.8	< .02	7.3	0.007	0.6	3.1	2	1.1	82.4
RS-496 880-885	249	0.96	19.1	22.9	< 1	56.7	0.02	1.39	0.07	1.3	4.9	10.63	2.71	4.9	301	0.19	21.7	0.11	1379	6.23	0.03	3.5	0.029	9.18	1.23	4.48	1.1	14.1	51.7	< .02	7.9	0.005	0.26	1.5	2	0.2	91.8
RS-496 NO#	1402	0.79	89.5	93.2	< 1	48.1	0.1	0.12	0.22	2	10.1	19.19	3.1	4.8	1447	0.11	15.4	0.02	151	32.92	0.006	8	0.029	17.56	2.27	14.69	0.5	11	7	< .02	4.4	0.002	1.2	26.7	7	0.5	65.3
89633 empty	< 2	< .01	< .1	< .2	< 1	< .5	< .02	< .01	< .01	< .1	< .5	< .01	< .01	< .1	< 5	< .01	< .5	< .01	< 1	< .01	< .001	< .1	< .001	< .01	< .01	< .02	< .1	< .1	< .5	< .02	< .1	< .001	< .02	< .1	< 2	< .2	< .1
STANDARD DS2	253	1.77	58	209.5	2	153.3	10.92	0.55	10.44	11.7	159.4	128.57	3.16	6.1	222	0.17	16.2	0.61	850	14.2	0.033	36.4	0.092	33.02	0.03	8.44	2.8	2.3	29.6	1.74	3.6	0.096	1.82	18.9	76	6.5	165

AMERICAN ASSAY LABORATORIES
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SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56908
METHOD: AAL03-0

ELEMENT SAMPLES	Ag ppb	Al %	As ppm	Au ppb	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	Se ppm	Sr ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RS-496 000-020	306	1.01	7.1	11.9	9	66.90	0.19	0.46	0.16	3.10	5.1	9.23	2.56	6.1	353	0.09	17.3	0.07	564	2.32	0.116	2.2	0.012	43.25	0.04	1.96	2.6	0.6	80.6	0.06	12.4	0.005	0.2	1.9	33	0.4	55.2
RS-496 020-040	258	0.73	7.6	10.6	4	93.60	0.04	1.8	0.44	2.40	2.8	5.21	1.74	6	45	0.1	26.6	0.08	1074	2.63	0.043	1.6	0.01	17.26	< .01	0.49	2	0.1	43.9	0.02	13.6	0.005	0.07	2.1	7	0.7	65.6
RS-496 040-060	96	0.63	4.3	1.5	3	130.10	0.03	1.59	0.44	1.20	2	3.93	1.77	5.6	30	0.09	26.2	0.08	1620	2.69	0.026	1	0.008	15.46	0.02	0.82	1.6	0.1	51.2	< .02	13.7	0.006	0.12	1.5	7	1	62.9
RS-496 060-080	47	0.60	2.7	1.7	1	48.50	0.04	1.57	0.3	1.10	2.9	3.35	1.73	5.1	12	0.09	24.6	0.08	769	2.25	0.025	0.7	0.007	12.2	< .01	0.42	1.4	0.1	33.5	< .02	13	0.006	0.04	1.4	6	0.8	54.1
RS-496 080-100	63	0.61	14.2	9.1	2	45.90	0.02	1.13	0.34	0.90	2.7	3.32	1.78	4.4	71	0.09	25	0.06	933	2.73	0.019	1.1	0.009	14.15	< .01	3.3	1.4	0.4	37.1	< .02	13.1	0.005	0.08	1.6	8	1	53.3
RS-496 100-120	114	0.54	18.5	19.7	< 1	168.30	< .02	0.25	0.25	1.40	1.4	5.56	1.83	4.1	314	0.09	27.2	0.05	1793	3.21	0.018	1.3	0.008	11.45	0.01	6.93	1.2	1	45.6	< .02	13.3	0.003	0.64	1.8	5	0.8	84
RS-496 120-140	58	0.63	15.3	8.5	2	84.20	0.03	0.21	0.18	0.90	1	4.87	1.88	3.9	212	0.09	23.1	0.04	1342	2.88	0.016	1.3	0.006	11.63	< .01	6.21	1.2	0.6	27.5	< .02	11.7	0.005	0.22	1.4	6	1.1	68.3
RS-496 140-160	52	0.48	19.0	38.6	3.0	50.10	0.05	0.12	0.03	0.30	1.6	4	2.62	3.1	51	0.08	24.7	0.02	238	2.62	0.011	0.9	0.007	8.45	0.02	10.35	1	0.8	35.6	< .02	13.3	0.005	0.07	1.3	4	1.4	23.3
RS-496 160-180	56	0.63	26.5	20.9	6	340.00	< .02	0.1	0.01	0.30	0.9	3.2	2.39	3.1	25	0.07	23.4	0.01	35	2.68	0.012	1.1	0.007	8.75	0.04	11.67	1	0.5	50.8	< .02	13.5	0.003	0.03	1.3	5	4.1	19.8
RS-496 180-200	27	0.42	10.7	6.1	3	317.00	< .02	0.13	0.04	0.50	0.6	3.08	2.4	3	52	0.09	28.7	0.02	889	2.14	0.013	0.8	0.009	9.83	0.01	4.9	1.1	0.2	40.8	< .02	14.5	0.006	0.59	1.5	5	3.5	36.6
RS-496 200-220	41	0.89	16.8	3.5	6	906.70	< .02	0.08	0.02	0.30	0.9	2.67	2.49	3.8	84	0.06	28.4	0.01	224	1.89	0.01	0.8	0.008	11.59	0.03	11.62	0.8	0.2	49.2	< .02	15.9	0.004	0.13	1.8	3	3.3	13.2
RS-496 220-240	38	0.67	34.2	10.4	3	1117.80	< .02	0.06	0.02	0.50	1.7	4.45	4.17	5.6	279	0.02	24.3	0.01	631	3.58	0.006	2.6	0.007	15.58	0.03	32.22	0.5	1	38.2	< .02	14.9	0.006	0.2	1.8	4	39.4	16
RS-496 240-260	98	0.68	29.4	68.8	3	620.20	0.02	0.03	0.01	0.40	3.2	4.69	1.83	4.1	232	0.01	14.3	< .01	738	3.27	0.004	1.8	0.007	17.19	0.02	28.28	0.4	2.1	73.2	0.02	8	0.004	0.09	1.1	4	32	6.7
RS-496 260-280	121	0.63	21.0	54.6	2	570.20	< .02	0.02	0.01	0.50	2.5	6.47	0.79	6.2	436	0.01	10.9	< .01	1779	6.16	0.003	2.1	0.006	13.95	0.03	14.62	0.3	2.6	94	< .02	3.8	0.002	0.23	0.6	5	8.8	8.3
RS-496 280-300	6884	0.46	73.2	238	4	976.60	< .02	0.03	0.23	2.00	18.1	37.98	4.09	3.7	6258	0.02	10.9	< .01	4925	12.87	0.006	13.6	0.009	15.91	0.04	43.4	0.2	2.3	298.2	0.03	2.9	0.004	1.24	1.1	16	16.3	33.1
RS-496 300-320	1182	1.11	28.7	79.3	3	615.20	< .02	0.03	0.1	1.50	9.6	28.06	2.83	4.4	6814	0.06	13	< .01	4822	10.84	0.01	7.6	0.006	18.91	0.07	19.97	0.5	11.5	106.1	0.03	4.6	0.002	0.79	0.6	9	4.9	15.2
RS-496 320-340	178	1.16	108.1	145.1	< 1	885.40	0.03	0.08	0.04	1.80	1.3	21.75	3.22	6	8312	0.12	10.3	0.02	19785	22.03	0.02	66.2	0.011	33.37	0.2	52.12	0.2	28.8	234.7	< .02	5.4	0.002	4.28	0.7	7	7.7	29.8
RS-496 340-360	141	0.81	88.4	211.5	6	169.70	0.04	0.05	0.06	4.60	2.5	6.71	6	2.1	2676	0.05	10.2	< .01	5094	9.08	0.012	1.8	0.015	28.85	1.08	29.34	0.8	55.4	122	0.03	13.2	0.002	1.59	2.1	2	1.6	29.8
RS-496 360-380	276	0.81	69.4	187.1	3	29.60	0.04	0.05	1.94	8.90	3.9	10.33	5.94	2.2	2441	0.06	13.3	< .01	238	3.96	0.016	4.6	0.013	41.62	5.17	35.98	1.3	48.2	85.5	0.02	14.5	0.001	3.99	9.0	4	1.4	99.6
RS-496 380-400	384	0.97	39.2	112.8	7	48.20	0.03	0.03	0.18	1.90	8.8	20.54	4.13	4	1222	0.19	21.3	0.01	196	4.2	0.022	6	0.009	23.49	3.27	19.3	0.9	12.6	17.2	< .02	10.7	0.002	1.48	2.2	7	0.8	112.4
RS-496 400-420	322	0.67	17.0	98.7	4	79.40	0.02	0.05	0.16	1.90	4.6	12.87	2.84	3.1	914	0.15	24.2	0.01	196	2.77	0.015	3.7	0.012	20.44	2.08	10.01	0.7	9.2	6.6	< .02	11.6	0.002	0.59	1.9	5	0.7	195.8
RS-496 420-440	466	0.4	30.7	91.9	1	50.90	0.03	0.05	0.18	1.60	5.5	17.88	2.89	2.3	1178	0.13	20.3	0.01	120	3.76	0.016	3.6	0.012	17.68	1.81	15.67	0.6	12.1	6.4	< .02	9.9	0.001	0.68	1.8	4	0.6	115.9
RS-496 440-460	478	0.53	22.8	123.5	4	32.80	0.02	0.1	0.15	1.50	6.3	16.25	3.06	3.4	739	0.14	21.5	0.02	113	3.7	0.018	3.3	0.013	30.26	2.27	12.24	0.9	13	9.4	< .02	10.4	0.001	0.98	1.6	4	0.6	118.3
RS-496 460-480	473	0.49	16.5	167.7	1	30.70	0.03	0.08	0.18	1.40	4.1	12.29	2.89	3.1	798	0.13	21.3	0.02	119	3.47	0.014	2.7	0.01	23.25	2.36	17.17	0.9	9.3	7.9	< .02	11.3	0.001	1.08	2.4	3	0.5	169.1
RS-496 480-500	282	0.49	6.0	56.7	3	68.80	0.03	0.05	0.06	0.90	2	10.58	2.68	2.8	395	0.12	23.4	0.01	93	3.05	0.012	2.2	0.011	21.98	1.88	11.76	0.7	3.6	6.9	< .02	12.1	0.004	0.47	2	3	1	123.2
RS-496 500-520	350	0.54	14.0	79.4	4	81.40	< .02	0.05	0.14	1.60	3.1	8.42	2.54	2.5	593	0.11	20.3	0.01	68	3.22	0.008	1.8	0.012	23.68	2.22	13.81	0.9	5.7	5	< .02	10.3	0.001	0.73	2.2	2	0.4	124.9
RS-496 520-540	1747	0.46	177.8	149.4	4	36.20	0.03	0.07	0.2	2.30	2.8	11.03	4.8	2.8	2118	0.14	21.1	0.02	107	7.75	0.011	2.9	0.024	28.42	4.46	70.91	0.8	28.9	5.7	< .02	9	0.008	3.75	2.8	5	0.9	165.2
RS-496 540-560	1013	0.38	152.2	213.6	3	39.10	0.04	0.09	0.23	2.30	6.1	17.09	4.64	2.6	2117	0.14	21.5	0.02	123	6.17	0.012	3.8	0.028	22.04	4.21	54.19	0.8	33.7	6.7	< .02	9.2	0.003	2.49	6	7	0.7	403.8
RS-496 560-580	449	0.49	50.9	65.4	5	98.40	0.03	0.09	0.16	2.00	5.3	13.67	3.62	3.5	698	0.13	24.8	0.02	775	4.38	0.014	3.2	0.025	20.25	1.51	22.52	1.1	11.5	10.1	< .02	10.9	0.021	0.97	2	6	3.8	170.4
RS-496 580-600	286	0.46	21.9	45.6	3.0	77.40	0.0	0.14	0.12	1.70	4.2	11.06	3.69	3.7	486	0.12	24.6	0.04	390	3.63	0.016	2.8	0.026	16.35	1.31	19.22	1	6.8	12.7	< .02	11.3	0.015	0.76	2	6	2.4	144
RS-496 600-620	270	0.54	23.4	41.9	1	92.1	0.02	0.14	0.13	1.6	3.5	10.74	2.96	3.9	446	0.13	23.8	0.04	637	3.27	0.018	2.4	0.026	11.46	0.97	12.62	1.1	6	13.6	< .02	11	0.015	0.62	1.4	6	2.9	127.2
RS-496 620-640	417	0.56	18	55.1	6	96.4	0.03	0.09	0.14	1.8	4.7	11.93	3.28	3.5	495	0.17	26.6	0.05	396	3.43	0.015	2.9	0.028	18.41	1.73	13.01	0.9	4.6	10.6	< .02	11.9	0.019	0.71	1.7	6	3.1	142.1
RS-496 640-660	461	0.56	36.1	60.7	2	73	0.04	0.07	0.2	2	5.2	14.97	3.85	3.1	956	0.22	24.7	0.04	735	4.5	0.014	4.3	0.027	19.25	2.81	26.49	0.8	9.6	17.4	< .02	10.6	0.007	0.88	2.1	6	3.3	111.9
STANDARD DS2	287	1.7	57	184.7	6	145	10.52	0.53	9.92	11.4	153.1	120.52	2.97	6.2	214	0.16	16.3	0.68	790	13.31	0.032	34.1	0.086	32.04	0.03	8.16	2.6	2.2	30.4	1.77	3.5	0.094	1.83	18.8	72	6.3	156.3
RS-496 660-680	314	1.08	21.1	41.4	< 1	200.9	0.19	2.25	0.48	2.1	9.3	13.36	2.54	3.9	761	0.22	26.4	0.14	2144	3.49	0.014	3.3	0.047	17.31	1.38	5.88	1.5	4	107.9	< .02	6.2	0.004	0.57	1.5	7	1	76.4

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0806
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56908
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-496 680-700	507	0.82	26.2	57.9	<1	127.4	0.16	1.26	0.25	2.6	7.4	13.56	2.81	4.9	511	0.22	24.4	0.12	1155	3.13	0.013	3.4	0.048	13.88	2.16	9.27	1.1	7.6	57.7	<.02	5.9	0.005	0.63	1.5	8	1	73.1
RS-496 700-720	855	0.87	69.3	116.5	<1	81.8	0.08	0.88	0.21	4.6	6.2	9.19	3.32	5.2	879	0.21	20.5	0.14	840	3.32	0.014	2.6	0.075	10.84	3.87	19.24	1.3	10.4	50.1	<.02	5.3	0.007	1.87	1.9	9	1.2	81.5
~~RS-496 720-740~~	~~540~~	~~1.19~~	~~26.3~~	~~109.6~~	~~1~~	~~89.4~~	~~0.09~~	~~0.66~~	~~0.17~~	~~4.5~~	~~4.7~~	~~9.48~~	~~2.67~~	~~5.8~~	~~728~~	~~0.3~~	~~23.4~~	~~0.2~~	~~571~~	~~2.76~~	~~0.016~~	~~2.8~~	~~0.078~~	~~11.55~~	~~2.42~~	~~11.06~~	~~1.5~~	~~6~~	~~46.8~~	~~<.02~~	~~6.3~~	~~0.012~~	~~1.19~~	~~2.1~~	~~13~~	~~0.8~~	~~74.7~~
RS-496 740-760	1056	1.03	42.6	120.7	<1	82.2	0.07	0.65	0.19	4.6	9	13.62	3.42	5.4	1302	0.21	22.3	0.13	579	3.61	0.011	3.9	0.071	15.11	3.42	16.75	1.1	10.2	49.4	<.02	6	0.006	1.79	1.7	10	1	86.4
RS-496 760-780	933	0.96	52.7	161.7	<1	56	0.1	0.55	0.12	4.8	6.8	9.68	2.92	5.8	1013	0.27	24.6	0.12	272	2.63	0.012	2.6	0.069	14.16	3.42	19.35	1.4	11.2	35	<.02	6.3	0.006	1.61	2	9	0.4	73.2
RS-496 780-800	2073	0.67	196.9	203.6	1	26.2	0.17	0.22	0.16	4.3	8.1	22.79	4.15	5.7	2980	0.06	19.3	0.03	178	64.69	0.005	6.8	0.053	19.8	3.61	24.79	0.6	9.2	11.6	<.02	4.7	0.002	1.76	12.6	8	0.4	79
RS-496 800-820	780	1.01	44.7	61.2	<1	54	0.07	0.78	0.17	1.1	6.7	12.44	2.99	5.1	765	0.2	18.6	0.08	601	16.31	0.017	2.5	0.028	14.79	1.94	11.25	0.9	8.9	29.7	<.02	6.3	0.007	0.77	7.6	3	0.2	84.9
RS-496 820-840	336	1.05	21.1	32.7	<1	71.4	0.06	0.76	0.1	1.2	4.3	17.46	2.84	5	326	0.2	22.9	0.1	1183	6.37	0.02	1.6	0.032	12.91	1.72	8.66	1.1	3.9	31.9	<.02	7.9	0.007	0.46	2.7	2	0.5	85.6
RS-496 840-860	428	1.03	27	35	<1	134.7	0.05	1.46	0.12	1.2	3.6	9.1	2.82	5.2	515	0.19	23.5	0.12	1092	8.32	0.021	1.8	0.03	11.14	0.85	5.95	1.2	3.1	57.6	<.02	8.6	0.009	0.44	3.2	2	1.6	74.4
RS-496 860-880	563	1.28	47.9	65.9	<1	112	0.05	1.35	0.12	1.8	6	9.58	2.97	6.1	738	0.21	21.6	0.13	999	13.46	0.021	2.3	0.032	13.47	1.43	7.87	1.3	7.6	53.8	<.02	7.3	0.007	0.6	3.1	2	1.1	82.4
RS-496 880-885	249	0.96	19.1	22.9	<1	56.7	0.02	1.39	0.07	1.3	4.9	10.63	2.71	4.9	301	0.19	21.7	0.11	1379	6.23	0.03	3.5	0.029	9.18	1.23	4.48	1.1	14.1	51.7	<.02	7.9	0.006	0.26	1.6	2	0.2	91.8
RS-496 NO#	1482	0.79	89.5	93.2	<1	48.1	0.1	0.12	0.22	2	10.1	19.19	3.1	4.8	1447	0.11	15.4	0.02	151	32.92	0.006	8	0.029	17.66	2.27	14.69	0.5	11	7	<.02	4.4	0.002	1.2	26.7	7	0.5	65.3
89633 empty	<2	<.01	<.1	<.2	<1	<.5	<.02	<.01	<.01	<.1	<.5	<.01	<.01	<.1	<5	<.01	<.5	<.01	<1	<.01	<.001	<.1	<.001	<.01	<.01	<.02	<.1	<.1	<.5	<.02	<.1	<.001	<.02	<.1	<2	<.2	<.1
STANDARD DS2	253	1.77	58	209.6	2	153.3	10.92	0.55	10.44	11.7	159.4	128.57	3.16	6.1	222	0.17	16.2	0.61	850	14.2	0.033	36.4	0.092	33.02	0.63	8.44	2.8	2.3	29.6	1.74	3.6	0.096	1.82	18.8	76	6.5	165

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56627
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-493 0000-0020	594	0.98	10.5	13.7	9	166.20	0.14	0.39	0.2	3.10	9.2	22.48	2.65	4.3	103	0.4	26.6	0.2	693	3.2	0.092	6.5	0.036	29.67	0.11	6.45	1.1	50.1	0.02	11.6	0.022	0.18	1.4	18	1	63.1
RS-493 0020-0040	156	0.61	4.4	3.9	3	69.10	0.03	0.46	0.2	0.80	6.3	8.38	2.23	2.5	33	0.25	29.2	0.06	940	2.67	0.057	1.9	0.023	24.66	0.04	3.07	0.5	29.9	< .02	13.6	0.024	0.05	1.8	9	1.7	49.5
RS-493 0040-0060	96	0.69	4.9	2.4	< 1	74.70	< .02	0.54	0.27	0.80	6.4	6.18	2.07	2.6	24	0.3	26.6	0.03	1166	2.1	0.025	2.2	0.023	37.43	0.11	7.05	0.4	24	< .02	13.2	0.01	0.06	1.2	7	1.3	78
RS-493 0060-0080	219	0.69	6.2	9.2	< 1	76.10	< .02	0.25	0.22	0.70	4.4	8.31	1.85	2.4	229	0.41	31.9	0.02	246	2.36	0.013	2.2	0.025	24.79	0.72	8.75	1.1	15.6	< .02	11.9	0.005	0.19	1.6	5	1.4	84.8
RS-493 0080-0100	109	0.63	3.8	3.5	2	64.00	0.03	0.21	0.29	0.80	4.6	9.86	2.65	2.9	68	0.36	35.8	0.02	495	2.74	0.033	2	0.033	28.74	0.25	5.67	0.6	16.6	< .02	16.3	0.012	0.07	1	6	1.6	113.7
RS-493 0100-0120	98	0.63	4.2	1.9	1	66.90	0.02	0.33	0.13	0.70	5.2	6.16	2.49	2.8	35	0.31	36.1	0.02	627	2.31	0.031	1.5	0.029	22.87	0.14	7.17	0.6	19.1	< .02	14.1	0.012	0.05	0.8	5	1.3	87.8
RS-493 0120-0140	106	0.52	8.7	9.3	2	68.10	< .02	0.26	0.27	1.00	3.9	7.02	2.1	2.3	326	0.35	38.1	0.02	213	2.31	0.026	1.7	0.038	32.07	0.95	10.99	0.7	19.7	< .02	13.4	0.006	0.18	1.2	6	2.2	66.6
RS-493 0140-0160	105	0.65	2.7	2.1	2.0	46.90	< .02	0.23	0.29	0.70	4.4	7.99	2.16	2.7	81	0.34	35.2	0.02	450	2.16	0.03	1.6	0.029	22.36	0.21	11.52	0.6	16.4	< .02	12.6	0.013	0.1	1.1	9	2.3	76.7
RS-493 0160-0180	107	0.51	3.6	2.1	2	51.40	< .02	0.22	0.23	0.80	6.1	11.73	2.61	2.6	85	0.3	33	0.02	1628	2.78	0.037	2.3	0.026	16.12	0.18	11.49	0.5	13.8	< .02	12.3	0.018	0.1	1.1	9	2.1	106.6
RS-493 0180-0200	121	0.56	4.8	5.5	1	88.00	0.02	0.19	0.24	1.00	6.4	10.26	2.4	2.7	262	0.32	32.1	0.02	453	2.32	0.029	1.9	0.027	18.53	0.68	9.28	0.6	13.4	< .02	12.1	0.012	0.18	1.1	9	1.9	84.7
RS-493 0200-0220	117	0.46	9.3	19.5	< 1	36.90	0.02	0.2	0.25	1.40	4.8	11.91	2.89	2.8	680	0.22	31.6	0.02	935	2.12	0.029	2.7	0.027	15.9	1.37	8.17	1	12.6	< .02	12.6	0.011	0.32	1.4	7	1.2	117
RS-493 0220-0240	107	0.37	4.7	2	1	28.20	< .02	0.24	0.25	1.10	5.2	9.08	2.71	2.2	161	0.15	34.7	0.03	1615	1.9	0.032	2.2	0.03	13.62	0.46	3.87	0.8	15.2	< .02	13.8	0.017	0.11	1.7	8	1.4	115.3
RS-493 0240-0260	131	0.37	8.8	14.7	1	39.70	< .02	0.18	0.27	2.00	1	7.21	2.93	2.6	361	0.15	35	0.02	676	1.77	0.019	1.8	0.037	18.57	2.44	8.38	0.9	11.5	< .02	14.6	0.007	0.19	1.6	4	1.1	196.7
RS-493 0260-0280	114	0.38	3.3	5.1	1	26.30	< .02	0.3	0.37	1.20	3.9	7.72	2.68	2.3	104	0.15	34.3	0.03	2005	1.79	0.028	1.6	0.034	13.97	0.43	3.96	0.6	18.6	< .02	13.2	0.02	0.06	1.6	7	1.6	141.3
RS-493 0280-0300	74	0.58	6.0	9.1	5	53.50	< .02	0.66	0.3	1.50	6.5	11.24	2.97	3.2	67	0.22	33.3	0.04	1092	1.72	0.044	2.5	0.033	13.88	0.61	4.67	0.8	29.4	< .02	13.6	0.023	0.07	1.7	8	1.5	93.2
RS-493 0300-0320	72	0.41	4.1	2.8	1	38.50	< .02	0.42	0.2	1.00	6.4	8.96	2.78	2.1	47	0.17	30.9	0.03	995	1.59	0.036	2.3	0.031	12.99	0.49	4.27	0.4	21.1	< .02	12.9	0.022	0.06	1.5	8	1.6	70.2
RS-493 0320-0340	70	0.39	2.8	1.8	< 1	37.90	< .02	0.61	0.27	0.90	4.6	9.21	2.42	2	31	0.21	31.4	0.02	924	1.73	0.036	2.2	0.025	12.9	0.3	2.67	0.6	28.5	< .02	12	0.019	0.05	1.2	7	1.4	53.6
RS-493 0340-0360	104	0.43	3.2	1.5	2	239.70	0.02	0.27	0.19	1.00	5.7	11.87	2.61	2.2	27	0.23	32	0.02	638	1.96	0.04	3	0.025	14.26	0.12	2.55	0.4	21.9	< .02	12.6	0.026	0.08	1.6	10	1.4	101.8
RS-493 0360-0380	82	0.53	1.2	1.4	3	67.60	< .02	0.63	0.21	0.90	7.8	16.34	2.56	2.9	11	0.32	32.5	0.03	1002	2.26	0.058	3.5	0.022	12.84	0.04	2.35	0.4	29.1	< .02	12.4	0.024	0.06	1.6	10	1.3	62.4
RS-493 0380-0400	86	0.36	2.2	1.7	2	57.10	0.03	0.76	0.27	0.90	10.8	16.67	2.76	1.9	16	0.23	27.8	0.02	1045	2.25	0.041	4.7	0.023	12.71	0.16	3.03	0.5	28.9	0.02	11.1	0.023	0.05	1.6	10	1.7	49.7
RS-493 0400-0420	426	0.75	0.9	1.6	< 1	348.00	0.22	1.74	0.77	0.50	6.2	9.36	1.33	3.2	40	0.34	30.8	0.09	1153	0.95	0.277	1.9	0.026	23.2	0.05	0.92	0.5	123.1	0.03	9.1	0.009	0.22	2.7	4	0.9	47.3
RS-493 0420-0440	133	1.17	2	1.3	< 1	327.40	0.21	0.88	0.32	0.90	4.6	7.37	1.48	4.6	19	0.33	28.1	0.15	329	1.23	0.412	1.3	0.029	17.75	0.03	0.45	0.4	160.6	< .02	7.9	0.008	0.19	2.2	4	0.4	51.4
RS-493 0440-0460	136	1.38	3.3	1.3	1	88.10	0.5	1.24	0.68	4.20	7.1	9.37	2.67	5.6	12	0.48	30.6	0.25	639	1.56	0.057	3.3	0.06	18.04	0.02	0.67	0.6	104	< .02	7.5	0.023	0.2	1.9	14	0.5	70.6
RS-493 0460-0480	113	1.25	2.5	4.3	< 1	66.60	0.17	2.35	0.31	8.90	10	10.9	3.09	5.6	5	0.42	29	0.34	1150	1.21	0.068	4.2	0.116	12.21	0.01	0.61	0.4	102.7	0.02	6.3	0.036	0.16	2.1	29	< .2	93.6
RS-493 0480-0500	133	0.85	4.2	0.6	< 1	96.40	0.09	1.41	0.3	8.40	9.8	25.3	3.93	4.2	13	0.41	28.2	0.19	783	4.02	0.071	7.7	0.119	10.66	0.02	1.33	0.8	73	0.02	7.5	0.054	0.15	3.1	40	0.5	78.7
RS-493 0500-0520	117	0.89	5.0	15.6	< 1	163.70	0.08	1.8	0.25	8.10	8.8	20.43	3.67	4.8	11	0.42	27.4	0.23	814	2.91	0.069	4.7	0.119	11.83	0.01	1.52	0.6	98.8	0.02	7.6	0.051	0.14	2.9	38	0.4	73.9
RS-493 0520-0540	121	1.60	2.6	4	< 1	333.00	0.08	2.32	0.26	9.20	10.3	9.66	2.99	6.2	6	0.44	30	0.48	748	0.65	0.064	3.5	0.122	14.82	0.02	0.8	0.3	167	0.03	7.3	0.024	0.15	2.2	27	< .2	85.1
RS-493 0540-0560	162	0.77	4.9	1.5	< 1	109.10	0.08	1.49	0.15	7.80	11.8	22.81	4.27	3.7	< 5	0.36	24.9	0.16	713	2.16	0.066	6.7	0.118	14.19	0.03	3.75	0.4	78.1	0.03	6.3	0.062	0.14	2.5	41	0.7	89.2
RS-493 0560-0580	90	0.75	3.6	1.3	1	94.30	0.07	1.26	0.18	5.00	10.5	20.38	3.74	3.5	< 5	0.32	27.9	0.13	654	2.04	0.049	5.5	0.086	13.88	0.03	4.27	0.3	77.5	< .02	8.5	0.04	0.13	1.9	30	0.7	68.4
RS-493 0580-0600	84	0.71	1.8	1.6	1.0	101.00	0.1	1.51	0.34	3.10	8	13.13	2.81	3.3	6	0.31	31.8	0.11	771	1.58	0.042	3.4	0.062	16.82	0.03	3.77	0.1	87.4	0.02	10.5	0.02	0.1	1.4	17	0.8	54.7
RS-493 0600-0620	129	1.19	3	0.9	< 1	96.4	0.06	1.87	0.16	8.6	6.4	13.2	3.53	4.8	6	0.36	28.5	0.37	702	1.3	0.046	3.8	0.123	14.89	0.01	1.86	0.5	147.3	0.02	6.6	0.042	0.12	2.2	32	0.2	101.9
RS-493 0620-0640	165	0.83	4.3	2	2	171.4	0.06	1.57	0.17	7.5	10.5	20.89	4.01	4.5	< 5	0.41	29.3	0.21	645	2.34	0.071	6.8	0.119	12.56	0.01	1.83	1.2	89.1	0.02	7.8	0.063	0.16	2.8	38	0.3	96.1
RS-493 0640-0660	137	1.39	2.5	2.4	6	276.5	0.09	1.94	0.22	7.9	8.6	11	2.84	6.5	24	0.52	32.5	0.36	719	1.02	0.057	3.1	0.111	16.36	0.08	1.08	2	152.1	0.02	6.6	0.03	0.24	1.8	27	< .2	98.1
STANDARD DS2	232	1.74	58.8	201.2	2	164.6	10.96	0.54	10.4	11.3	163.9	127.72	3.09	6	229	0.17	16.5	0.61	829	14.02	0.029	35.3	0.001	32.82	0.04	9.67	2.4	27.5	1.88	3.7	0.092	1.85	20	76	6.5	161.6
RS-493 0660-0680	134	1.16	3.5	2	4	135.3	0.09	1.78	0.2	6.8	9.6	14.65	2.98	5.7	16	0.41	29.6	0.35	688	1.55	0.057	3.1	0.107	16.01	0.02	0.92	< .1	131	< .02	6.7	0.032	0.2	2	25	0.2	87.1

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP56027
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-493 0680-0700	111	1.46	2.3	1.8	4	142.9	0.11	2.42	0.26	6.2	5.7	7.68	2.37	6.9	23	0.49	32.9	0.36	894	0.68	0.06	2.1	0.092	16.22	0.01	0.67	< .1	152.5	< .02	6	0.023	0.23	1.9	20	< .2	83.2
RS-493 0700-0720	145	1.3	4.4	2.9	1	241.7	0.31	1.9	0.33	3.2	5.4	10	1.9	5.5	66	0.49	25.6	0.2	686	1.31	0.043	1.5	0.067	40.72	0.09	1.02	< .1	146.3	< .02	6.3	0.018	0.28	1.8	11	0.5	102.9
RS-493 0720-0740	137	0.76	5.9	2.1	4	228.4	0.18	1.12	0.21	2.3	6.1	17.92	2.68	4.1	16	0.34	24.2	0.11	595	3.04	0.067	2.7	0.05	33.99	0.03	1.9	0.2	79.3	< .02	9	0.045	0.18	1.6	12	1.3	91.3
RS-493 0740-0760	92	0.67	3.5	1.5	4	161.5	0.11	0.83	0.16	2.5	8.5	22.18	3.07	3.1	41	0.29	21.1	0.09	411	3.83	0.055	4.2	0.046	15.79	0.05	1.87	< .1	65.7	< .02	8.5	0.037	0.15	1.6	13	1	66.2
RS-493 0760-0780	125	1.68	2.8	1.4	< 1	122.1	0.09	3.56	0.3	6.8	8.7	7.71	3.06	7	11	0.5	31.9	0.44	1012	0.46	0.029	1.8	0.129	16.88	0.04	1.06	0.3	163.6	< .02	4.7	0.03	0.22	2.1	27	< .2	99.1
RS-493 0780-0800	120	1.15	2.9	1.7	< 1	144.3	0.08	3.17	0.27	7.4	6.7	11.24	2.84	5.6	22	0.4	31.1	0.3	895	0.71	0.033	2.6	0.119	15.48	0.06	1.07	0.1	156.2	< .02	4.8	0.031	0.19	2.8	22	0.2	92.3
RS-493 0800-0820	109	0.74	5	0.7	2	103.3	0.07	1.48	0.14	8.2	10.7	17.77	3.88	4.4	21	0.35	26.6	0.2	739	1.9	0.05	4.6	0.116	11.54	0.02	1.09	0.2	67.7	0.04	5.3	0.066	0.15	2.2	32	0.3	93.1
RS-493 0820-0840	126	1.39	3.6	1.8	3	191.5	0.11	1.84	0.24	8.1	8.6	9.78	2.94	6.4	38	0.52	27.9	0.45	748	0.8	0.05	2.7	0.113	15.24	0.05	0.99	0.2	117.6	0.02	5	0.034	0.24	2	24	0.2	88
RS-493 0840-0860	123	1.17	2.8	1.8	< 1	188.6	0.09	1.91	0.28	7.4	11	11.26	2.82	5.8	24	0.43	29.3	0.37	838	0.64	0.051	3.1	0.118	13.66	0.03	0.82	0.2	118.2	0.02	4.6	0.027	0.21	2	23	< .2	95.4
RS-493 0860-0880	121	0.9	2.4	1.6	1	140.3	0.12	1.84	0.22	4.7	4.6	9.5	1.92	4.2	21	0.33	29.6	0.22	681	0.64	0.05	2.6	0.073	17.23	0.02	0.65	0.2	122.5	< .02	5.3	0.014	0.14	1.6	15	0.2	66.3
RS-493 0880-0900	139	0.74	4.9	1.5	1	144.5	0.12	1.77	0.19	2.5	5.4	8.52	2.14	3.2	106	0.3	22.6	0.11	669	1.04	0.027	1.5	0.057	21.64	0.21	2.26	0.1	84.8	< .02	7.5	0.028	0.16	1.6	13	0.6	77.3
RS-493 0900-0920	150	1.07	3.7	2.1	2	236.7	0.1	1.33	0.32	2.5	3.3	5.9	2.17	4.7	80	0.42	26.5	0.12	504	1.15	0.022	1.2	0.052	23.47	0.11	2.47	0.3	79.3	< .02	9.7	0.025	0.18	2.4	12	0.8	85
RS-493 0920-0940	271	1.12	39.2	17.6	2	71.1	0.1	1.84	0.31	3.5	5.3	7.1	3.51	4.7	215	0.41	22.3	0.13	612	1.73	0.021	1.3	0.063	25.41	3.14	9.37	1.9	81.5	< .02	7.7	0.012	0.44	1.4	9	0.3	66.6
RS-493 0940-0960	164	0.78	24	11.5	< 1	106.7	0.09	5.76	0.27	2.7	8.2	8.48	2.81	3.5	172	0.27	17.3	0.11	2269	1.89	0.021	1.3	0.052	51.44	1.98	7.44	1.2	111.2	0.02	6.7	0.013	0.26	2	9	0.7	57.9
RS-493 0960-0980	92	0.61	6.9	2.3	< 1	182.6	0.05	6.08	0.26	3	4.1	6.08	1.97	3.2	78	0.28	23.2	0.13	2474	1	0.03	0.7	0.058	18.42	0.27	2.84	0.4	132.2	0.02	7.7	0.022	0.14	2.4	10	0.6	42.7
RS-493 0980-1000	104	0.75	13.5	2.5	1	117.6	0.06	3.09	0.19	2.6	4.5	7.03	1.92	3.6	115	0.28	19.9	0.1	1209	0.92	0.029	1	0.052	30.58	0.67	3.58	0.2	99.6	0.03	7.7	0.016	0.13	1.3	6	0.6	58.9
RS-493 1000-1020	112	0.95	6.4	1	< 1	211.1	0.08	2.17	0.34	3.2	4.3	6.04	2.02	4.7	61	0.34	24.3	0.15	902	1.08	0.043	1.1	0.068	20.21	0.16	1.59	0.3	104.9	0.02	8	0.025	0.12	1.6	11	0.4	59.8
RS-493 1020-1040	106	0.89	7.2	9.6	< 1	133.7	0.04	2.23	0.22	2.9	3.3	5.64	2.07	4.6	27	0.36	25.9	0.14	944	0.99	0.06	1	0.059	19.56	0.11	1.36	0.3	92.4	0.02	8.7	0.026	0.1	1.6	12	0.5	57.7
RS-493 1040-1060	109	0.92	6.4	3.4	2	82	0.02	1.11	0.19	2.2	3.2	6.51	2.08	4.8	18	0.31	23	0.12	641	1.33	0.081	1.4	0.047	17.33	0.06	1.13	0.3	82.4	< .02	9.4	0.023	0.07	1.7	11	0.8	63
RS-493 1060-1080	103	0.84	6.2	2.2	3	95.4	0.03	1.24	0.23	2.7	5.3	8.67	2.17	4.2	20	0.3	21.6	0.13	609	1.66	0.074	1.9	0.052	19.82	0.07	0.95	0.3	79.8	< .02	9	0.026	0.08	2.8	13	0.7	77.9
RS-493 1080-1100	124	0.77	5	1.9	1	111.6	0.04	1.43	0.19	2.8	3.9	7.48	2.02	3.8	72	0.25	24.9	0.11	558	1.58	0.057	1.6	0.055	16.15	0.21	2.18	0.4	81.5	< .02	9.1	0.026	0.09	3.2	12	0.7	80.6
RS-493 1100-1120	287	0.66	5	2.2	< 1	115.6	0.05	1.64	0.19	2.5	5.4	7.32	2.19	3.2	87	0.22	25.3	0.12	638	1.87	0.038	1.6	0.063	18.75	0.25	2.12	0.3	92.9	< .02	8.8	0.027	0.09	3	12	0.7	75.9
RS-493 1120-1140	497	5.91	7.3	3.3	2	133.6	0.26	1.93	0.17	3.9	6.4	6.92	2.23	4.1	46	0.3	24.5	0.16	691	3.17	0.033	2	0.07	20.65	0.44	2.34	0.3	99.9	< .02	7.1	0.02	0.13	2.6	14	0.5	73.6
76009 empty	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDARD DS2	234	1.72	57.5	205.1	2	152	10.95	0.54	10.63	12	162.5	127.38	3.09	6	237	0.16	16.6	0.6	823	14.65	0.033	35.7	0.091	30.46	0.01	9.79	2.2	30.2	1.79	3.7	0.093	1.89	19.9	74	6.6	161.6

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP66949
METHOD: AAL03-0

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 358-0606
FAX: (775) 356-1413

ELEMENT SAMPLES	Ag ppb	Al %	As ppm	Au ppb	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	Se ppm	Sr ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RS-495 0000-0020	213	1.38	13.6	21.5	12	244.10	0.21	0.68	0.21	4.00	11.1	16.69	2.54	6.3	93	0.26	24.2	0.3	546	2.46	0.103	8.3	0.036	27.66	0.09	5.71	2.6	1.3	87	<.02	6.5	0.014	0.23	1.1	19	0.4	58.1
RS-495 0020-0040	64	1.13	2.4	3.2	5	260.90	0.43	0.66	0.23	1.80	4.5	10.88	2.01	5.8	8	0.27	23.1	0.13	989	1.93	0.093	3.4	0.036	41.4	0.04	0.83	1	0.2	49.2	<.02	6.4	0.018	0.16	1.7	5	0.4	68.7
RS-495 0040-0060	32	2.22	4.2	0.9	3	141.40	2.45	1.06	0.58	1.10	2.4	8.06	1.67	7.7	44	0.21	24.5	0.23	333	0.77	0.039	1.9	0.034	51.2	0.01	0.5	0.8	0.3	94.4	0.11	5.7	0.003	0.21	2.1	<2	0.5	63.8
RS-495 0060-0080	34	0.90	2.6	0.5	3	256.30	15.92	0.94	0.64	1.10	6	8.06	2.27	3.9	20	0.22	18.6	0.1	958	1.51	0.061	2.3	0.022	32.98	0.01	0.55	0.8	0.3	49.5	0.11	7.6	0.018	0.19	1.8	2	0.5	39.1
RS-495 0080-0100	38	0.47	2.3	0.6	2	113.40	3.86	0.61	1.56	1.16	2.9	4.51	2.37	4.3	24	0.26	23.5	0.08	702	0.84	0.076	1.1	0.016	19.28	0.01	0.68	1.2	0.2	20.3	0.06	9.4	0.058	0.26	1	2	0.7	33.3
RS-495 0100-0120	31	0.52	3	0.6	1	116.20	0.9	1	0.63	1.20	2.1	3.43	2.56	4.4	44	0.17	8.9	0.08	769	0.74	0.083	0.8	0.023	23.34	0.01	0.54	1.6	0.2	36.4	0.02	7.8	0.05	0.09	1.2	<2	0.5	51.2
RS-495 0120-0140	33	0.52	2.7	0.2	2	114.80	1.35	0.96	0.3	1.30	1.4	3.71	2.33	4.1	20	0.17	16.1	0.05	706	1.04	0.065	0.9	0.017	20.84	0.01	0.59	1.1	0.3	40	0.03	9.7	0.034	0.04	1.6	<2	0.7	61.1
RS-495 0140-0160	40	0.48	2.5	0.5	3.0	78.20	0.61	0.74	0.17	1.20	3.6	4.98	2.26	3.5	8	0.17	23.4	0.04	543	0.99	0.078	1.3	0.026	30.48	0.01	0.6	1.1	0.5	30.7	<.02	11	0.038	0.02	1.7	<2	0.6	71.9
RS-495 0160-0180	36	0.56	2.8	0.5	2	83.70	0.57	1.15	0.13	1.00	4.2	4.75	2.16	3.7	13	0.14	16.1	0.06	813	1.86	0.072	1.3	0.013	15.19	0.01	0.75	1.4	0.5	46.6	<.02	11.4	0.024	<.02	1.2	<2	1.1	56.9
RS-495 0180-0200	41	0.49	11.2	0.8	1	57.20	0.59	0.31	0.17	0.90	2.8	4.62	2.2	2.9	262	0.13	20.1	0.04	386	0.96	0.062	1.3	0.018	18.15	<.01	3.29	0.9	0.7	43.3	<.02	12.9	0.026	<.02	1.8	4	0.7	51.1
RS-495 0200-0220	43	0.41	3.2	0.9	3	63.10	0.49	0.36	0.14	1.10	3.1	5.33	2.5	2.9	35	0.14	21.4	0.04	473	1.33	0.062	1.5	0.017	11.04	0.01	1.15	1.2	0.4	31.9	<.02	12.1	0.039	<.02	1.6	2	1.6	67.2
RS-495 0220-0240	44	0.45	3.3	0.4	3	61.30	0.14	0.59	0.12	1.30	4.3	5.86	2.42	3.4	8	0.14	19	0.06	568	1.25	0.08	1.6	0.015	10.96	0.01	1.12	1.4	0.4	36.4	<.02	13	0.033	<.02	1.3	2	1.3	68.3
RS-495 0240-0260	43	0.47	14.6	0.5	2	60.10	0.14	0.62	0.14	1.40	5.7	10.1	2.87	4	<5	0.15	18.4	0.07	783	2.21	0.074	3.2	0.013	10.13	0.01	0.94	1.7	0.4	39.7	<.02	12.9	0.037	<.02	1.2	2	1.7	76
RS-495 0260-0280	41	0.37	26.0	0.2	3	48.80	0.2	0.28	0.13	1.50	8.6	14.2	3.2	3.9	<5	0.14	15.2	0.06	612	3.12	0.073	4.3	0.011	7.66	<.01	0.78	1.8	0.4	24.2	<.02	11.5	0.038	0.02	1	2	1.6	78.1
RS-495 0280-0300	46	0.41	18.7	0.6	6	53.10	0.14	0.38	0.15	1.60	8.3	15.2	3.28	4.2	<5	0.15	16.7	0.07	695	3.06	0.08	4.5	0.011	10.15	0.01	0.77	1.8	0.5	31.2	<.02	12.2	0.039	<.02	1	2	1.3	75.2
RS-495 0300-0320	45	0.32	12.0	1	4	51.80	0.12	0.25	0.13	1.40	5.6	12.5	3.14	3.4	8	0.12	17.1	0.06	711	2.68	0.065	3.3	0.009	19.11	0.01	0.66	1.5	0.5	24.5	<.02	11.1	0.038	<.02	0.9	2	1	70.5
RS-495 0320-0340	51	0.41	33.2	1.1	4	49.60	0.09	0.62	0.17	1.50	7.7	15.96	3.33	4.1	<5	0.15	17.3	0.08	1076	3.26	0.081	4.6	0.016	8.54	0.02	0.87	1.9	0.4	36.8	<.02	11	0.037	<.02	0.9	3	1.5	79.1
RS-495 0340-0360	51	0.38	28.1	1.1	4	57.60	0.19	0.37	0.14	1.50	6.1	16.73	3.44	4	<5	0.14	15.8	0.07	1102	3.12	0.079	4.4	0.011	7.84	0.01	0.97	1.8	0.5	26.8	<.02	11.6	0.039	<.02	0.9	3	1.6	74.1
RS-495 0360-0380	57	0.35	22.3	0.5	4	64.70	0.39	0.22	0.16	1.60	8.1	18.76	3.34	3.6	5	0.17	12.5	0.08	1031	3.89	0.092	5.5	0.012	6.36	0.02	0.77	2	0.2	19.9	<.02	10.7	0.036	0.03	0.9	3	1.5	73.6
RS-495 0380-0400	60	0.33	19.1	1	5	51.80	0.21	0.26	0.07	1.40	16.8	19.98	3.56	3.2	<5	0.16	12.3	0.09	661	4.16	0.083	6.5	0.014	6.1	0.02	0.74	1.8	<.1	20.4	<.02	10.1	0.032	0.03	0.9	3	1.3	69.8
RS-495 0400-0420	56	0.39	15.3	0.7	6	50.00	0.76	0.61	0.17	1.40	8.7	12.31	3.31	3.7	<5	0.14	14.8	0.08	728	3.11	0.079	4.2	0.009	8.94	0.02	3.07	1.7	<.1	36.6	<.02	11.7	0.036	<.02	1.1	3	1.6	65.4
RS-495 0420-0440	49	0.42	11	9.4	3	53.30	0.72	0.4	0.17	1.50	5.2	11.39	2.93	3.9	<5	0.15	14.9	0.05	678	2.89	0.092	2.7	0.009	12.93	<.01	2.1	1.6	0.1	32.2	<.02	12.7	0.035	0.03	1	2	1.3	58.8
RS-495 0440-0460	57	0.45	28.9	4.8	3	51.80	0.24	0.37	0.13	1.40	4.8	12.93	3.33	4.7	<5	0.16	15.7	0.06	784	2.82	0.083	2.4	0.011	70.02	0.01	0.78	1.7	<.1	31.5	<.02	10.8	0.039	0.02	1	2	1.4	60.3
RS-495 0460-0480	46	0.47	18.5	1.4	3	53.40	0.28	0.54	0.21	1.20	5	10.9	3.01	4.4	<5	0.15	15.8	0.07	839	2.67	0.076	2.4	0.018	15.51	0.01	0.66	1.7	0.2	30.9	<.02	11.3	0.036	<.02	1	2	1.2	71.7
RS-495 0480-0500	34	0.46	7.8	0.8	3	53.40	0.49	0.65	0.13	1.20	4.3	8.67	2.91	3.5	<5	0.14	17.7	0.05	590	2.35	0.075	2.1	0.017	9.61	0.01	0.63	1.5	0.2	28.8	<.02	11.6	0.037	<.02	1	2	1	60.9
RS-495 0500-0520	43	0.42	7.0	1.1	3	47.20	0.2	0.88	0.16	1.20	4.2	6.81	2.67	3.2	7	0.12	19.8	0.05	684	1.74	0.069	1.6	0.013	7.66	0.02	0.58	1.6	0.2	37.8	<.02	11.1	0.032	<.02	1.1	2	1.1	61.3
RS-495 0520-0540	42	0.39	25.0	0.6	2	45.50	0.36	0.48	0.17	1.30	6.6	13.36	2.99	3.8	6	0.13	17	0.05	919	2.83	0.073	2.9	0.011	6.1	0.01	0.6	1.8	0.1	26.4	<.02	11.6	0.026	<.02	0.9	2	0.9	68.2
RS-495 0540-0560	48	0.39	20.3	1.1	3	40.80	0.55	0.68	0.14	1.30	6.8	10.33	2.66	3.6	<5	0.12	16	0.06	1090	2.29	0.062	2.4	0.011	6.81	0.01	0.65	1.6	0.1	31.7	<.02	10.8	0.027	<.02	1	2	0.8	60.7
RS-495 0560-0580	61	0.45	5.5	0.5	1	39.00	1.05	0.81	0.15	1.00	3.9	6.69	2.64	3.4	41	0.12	18.9	0.05	923	1.47	0.058	1.4	0.012	12.9	0.02	0.88	1.4	0.2	34.6	0.05	11.2	0.027	<.02	1.3	<2	0.8	67.7
RS-495 0580-0600	48	0.36	4.5	0.6	1.0	41.00	1.0	0.81	0.15	0.90	3.9	7.51	2.72	2.7	7	0.11	17	0.03	866	1.8	0.058	1.7	0.011	6.63	0.02	0.72	1.3	0.3	33.6	0.02	10.3	0.025	<.02	1.4	2	0.7	51
RS-495 0600-0620	63	0.64	4.1	0.8	3	41.4	0.04	0.66	0.07	1.3	3.9	10.21	3.14	3.8	14	0.15	16.8	0.08	806	2.68	0.047	2.4	0.013	7.4	0.01	0.56	1.4	0.1	30.6	<.02	11.4	0.017	<.02	2.4	3	0.7	68.5
RS-495 0620-0640	55	0.45	3.3	0.4	2	45.9	<.02	0.59	0.07	1.2	3	10.53	2.46	3.1	19	0.14	18.7	0.08	621	2.6	0.064	2.4	0.022	6.67	0.02	0.48	1.6	0.3	33.2	<.02	11.2	0.018	<.02	2.4	3	0.6	65.6
RS-495 0640-0660	47	0.37	4.7	0.6	3	54.3	0.04	0.66	1.35	1.3	4.8	9.38	2.85	2.8	6	0.12	17.5	0.04	823	2.29	0.059	2.6	0.017	7.3	0.01	0.74	1.3	0.2	35.3	<.02	10.4	0.02	<.02	1.4	3	0.9	53.7
STANDARD DS2	249	1.76	58.2	206.4	1	150.5	11.31	0.64	10.51	12.3	160.9	126.54	3.03	6.6	227	0.17	16.6	0.6	920	14.16	0.031	35	0.09	34.56	0.03	9.72	4.3	2.6	30.1	1.9	4.1	0.096	2.45	19.3	76	6.6	159.8
RS-495 0660-0680	76	0.34	<.1	0.5	2	71.3	0.06	0.26	0.08	1.2	3.7	9.16	2.6	2.9	8	0.13	21.1	0.03	246	2.26	0.067	2.1	0.016	9.21	0.01	0.67	0.7	0.2	38.8	<.02	9.8	0.028	<.02	3.3	3	0.7	62.9

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP66949
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-495 0680-0700	60	0.39	<.1	0.4	1	69.7	0.1	0.86	0.1	1.1	3	6.94	2.14	2.4	9	0.14	20.4	0.05	624	1.82	0.06	1.6	0.02	9.77	0.01	0.52	0.6	0.2	60.7	<.02	7.7	0.019	0.02	2.4	5	0.6	47.8
RS-495 0700-0720	42	0.61	<.1	0.3	3	75.2	0.08	0.63	0.1	1.1	4.1	8.08	2.27	3	23	0.2	23	0.06	473	1.93	0.048	1.7	0.029	20.81	0.03	0.99	1	0.2	53.1	<.02	8	0.026	0.02	1.3	5	0.9	31.5
RS-495 0720-0740	37	0.42	3	0.2	2	63	1.27	0.58	0.09	1.5	4.8	7.83	2.44	3.1	36	0.17	18.4	0.1	417	2.01	0.038	1.6	0.045	12.8	0.02	1.35	1.3	0.2	41	<.02	7.8	0.047	<.02	1.2	2	1.2	38.3
RS-495 0740-0760	53	0.41	4.1	0.4	2	68.8	2.7	0.47	0.09	1.6	3.6	9.9	2.36	2.7	26	0.17	17.6	0.09	429	2.58	0.041	2.1	0.032	9.32	0.02	0.98	1.3	0.2	37	0.02	8	0.039	0.03	0.8	3	1	37.9
RS-495 0760-0780	66	0.38	4.2	0.7	3	89.8	0.3	0.44	0.08	1.8	4.6	9.88	2.36	2.6	8	0.15	18.4	0.09	554	2.63	0.041	2.2	0.023	9.39	0.01	1.01	1.2	0.2	37.7	<.02	8.1	0.028	<.02	0.7	2	1	44.9
RS-495 0780-0800	60	0.53	2.6	0.2	2	91.9	0.09	0.5	0.08	1.7	3	9.37	2.46	3.1	7	0.19	18.1	0.11	460	2.46	0.063	1.8	0.034	9.44	0.01	0.46	1.5	0.2	53.3	<.02	9	0.03	<.02	1.2	3	0.9	54.2
RS-495 0800-0820	141	0.53	5.8	0.2	4	73.9	0.2	0.46	0.07	2	3.8	7.96	2.41	3.2	<5	0.19	19.1	0.12	656	2.25	0.067	1.6	0.032	7.36	0.01	0.46	1.6	0.2	68.5	<.02	9.6	0.038	<.02	0.8	2	0.8	57
RS-495 0820-0840	56	0.48	3.9	0.3	2	60.6	0.22	0.45	0.06	2.3	2	8.08	2.3	3	<5	0.17	19.3	0.11	783	2.09	0.049	1.8	0.033	6.38	0.01	0.47	1.5	0.2	68.5	<.02	10.1	0.036	<.02	1.1	2	0.9	51.3
RS-495 0840-0860	61	0.53	1.1	0.3	3	60.5	0.14	0.44	0.1	2	2.7	11.5	2.45	3.1	13	0.19	18.1	0.13	545	2.74	0.047	1.8	0.034	30.18	<.01	0.44	1.4	0.2	51.4	<.02	9.1	0.026	0.03	2.1	2	0.7	66.8
RS-495 0860-0880	83	0.64	0.4	<.2	2	67	0.11	0.45	0.1	2.2	6.7	12.8	2.99	3.8	16	0.22	17	0.12	481	4.06	0.057	3.5	0.041	6.23	<.01	0.49	1.5	0.2	54	<.02	9	0.026	0.04	2.3	4	0.6	71.8
RS-495 0880-0900	200	0.54	1.7	0.7	3	67	0.14	0.5	0.14	2.4	7.2	15.26	2.95	4.1	17	0.17	18.6	0.13	639	4.29	0.045	4.4	0.038	7.45	<.01	0.64	1.2	0.2	38.5	<.02	8.5	0.024	<.02	3.2	4	0.9	85.9
RS-495 0900-0920	109	0.86	<.1	0.4	3	86.7	0.11	0.31	0.22	2.2	5.1	11.8	2.74	6.7	11	0.20	18.9	0.15	566	3.46	0.094	2.6	0.036	7.01	<.01	0.33	1.7	0.2	28.7	0.02	9.5	0.031	0.03	2.3	2	0.5	84.3
RS-495 0920-0940	93	0.75	<.1	0.2	5	77.4	0.09	0.28	0.23	2.3	7.6	18.65	2.87	5	<5	0.26	18.2	0.15	605	3.67	0.094	3.8	0.039	7.97	<.01	0.33	1.5	0.2	30.5	<.02	9.4	0.029	0.04	2.5	3	0.5	85.5
RS-495 0940-0960	62	0.79	0.3	0.4	4	84.2	0.28	0.33	0.11	1.8	6.2	9.68	2.55	3.9	11	0.31	17.9	0.11	446	2.16	0.088	2.9	0.037	8.14	<.01	0.65	1.4	0.1	50	<.02	9.8	0.033	0.08	3.3	2	0.7	53.1
RS-495 0960-0980	92	0.91	1.6	0.3	5	87.4	0.17	0.58	0.2	1.9	4.5	7.93	2.41	4.4	10	0.34	19.4	0.13	1064	1.98	0.079	2.4	0.035	13.47	<.01	0.46	1.6	0.2	54.1	<.02	9.2	0.033	0.1	2.7	3	0.7	67.3
RS-495 0980-1000	60	0.4	4.8	1.5	5	88.4	0.16	0.28	0.12	2	8.7	12.83	2.94	3	58	0.15	14.8	0.13	1188	2.71	0.045	4.5	0.034	11.57	<.01	0.69	1.4	0.1	33.8	0.02	9.8	0.035	0.02	1.8	3	0.9	70.4
RS-495 1000-1020	69	0.46	1.5	0.6	5	58.4	0.12	0.27	0.25	2.1	6.6	11.13	2.79	3.2	40	0.16	14.2	0.11	700	2.69	0.046	4.1	0.032	7.72	<.01	0.62	1.3	0.1	36.4	<.02	9.5	0.033	<.02	2.6	3	0.8	75.1
RS-495 1020-1040	106	0.7	0.6	<.2	4	82.3	0.14	0.3	0.24	1.8	6.6	13.16	2.66	4.4	55	0.28	15	0.14	844	2.59	0.094	2.7	0.034	9.14	<.01	0.64	1.4	0.2	30.6	<.02	9.7	0.038	0.06	2.5	3	0.5	73
RS-495 1040-1060	96	0.94	<.1	<.2	6	87.6	0.13	0.4	0.21	2	6.7	10.18	2.74	5.3	27	0.33	16.4	0.17	613	2.95	0.09	3.6	0.034	26.32	<.01	0.49	1.6	0.2	34.8	<.02	8.9	0.039	0.08	2.1	3	0.6	82.6
RS-495 1060-1080	95	0.49	0.1	1.7	5	60.9	0.08	0.27	0.17	2	10	14.22	3.08	4.5	48	0.16	14.5	0.14	556	3.71	0.039	5.5	0.032	19.39	<.01	0.56	1.1	0.2	18.9	<.02	7.7	0.034	0.02	1.7	3	0.8	75.9
RS-495 1080-1100	81	0.7	<.1	0.4	3	70.6	0.06	0.33	0.17	2.1	6.3	11.6	2.82	5.6	21	0.23	15.7	0.18	780	3.66	0.082	3.7	0.037	8.75	<.01	0.29	1.1	<.1	18.3	<.02	8.6	0.033	0.02	1.7	2	0.5	78.8
RS-495 1100-1120	47	0.38	0.1	<.2	5	48.2	0.03	0.27	0.12	2.2	8.6	14.32	2.84	3.4	23	0.13	12.2	0.12	604	3.84	0.042	5.2	0.03	8.59	<.01	0.49	1.2	0.1	17.7	<.02	7.8	0.031	<.02	1.9	3	1.1	76.3
RS-495 1120-1140	64	0.52	1.4	0.3	5	57.8	0.07	0.34	0.22	1.9	7	12.91	2.96	3.3	85	0.23	14.4	0.12	623	3.13	0.065	4.4	0.029	7.95	<.01	0.53	1.2	0.3	24.4	<.02	9.6	0.042	0.03	2	3	1	63.3
RS-495 1140-1160	64	0.46	0.1	19.4	4	50.6	0.11	0.29	0.13	1.9	10.2	18.89	2.98	3.3	5	0.19	14.9	0.12	686	3.77	0.067	5.3	0.032	9.66	<.01	0.46	0.7	0.2	18.6	<.02	9.7	0.034	0.02	1.6	4	0.6	68.3
RS-495 1160-1180	89	0.58	<.1	6.5	3	45.3	0.1	0.44	0.14	2.3	10.8	23.59	3.16	5.5	41	0.18	19.4	0.12	740	4.21	0.047	7.5	0.034	13.02	<.01	0.48	1	0.2	18.3	<.02	9.8	0.042	<.02	1.3	4	0.8	74.9
RS-495 1180-1200	82	0.59	<.1	3.2	3	48.3	0.12	0.39	0.24	1.9	9.9	19.33	3.14	6.5	10	0.2	19.1	0.11	755	4.52	0.051	6.7	0.034	12.42	0.01	0.34	1.1	0.2	14.8	<.02	9.5	0.05	<.02	1.2	4	0.5	74.5
RS-495 1200-1220	86	0.59	<.1	1.6	3	51.8	0.13	0.44	0.14	1.9	8.1	18.06	2.87	5.8	19	0.17	20.5	0.1	823	3.86	0.046	5	0.036	13.66	0.01	0.38	1.1	0.3	16.3	<.02	10.2	0.049	<.02	1.3	3	0.4	77.2
RS-495 1220-1240	86	0.63	<.1	0.9	3	56.9	0.1	0.61	0.26	2	10.4	21.01	3.17	6.1	64	0.2	21.6	0.11	879	5.04	0.05	5.5	0.034	12.8	<.01	0.6	1.2	0.2	22.8	<.02	10.3	0.043	<.02	1.2	4	0.6	75.9
RS-495 1240-1260	78	0.55	<.1	0.9	6	46.1	0.84	0.38	0.11	2.1	9.6	16.23	3.26	5.7	9	0.17	21.6	0.13	597	4.25	0.044	5.6	0.035	12.79	<.01	0.4	1.2	0.2	13.8	<.02	10	0.058	<.02	0.9	4	0.8	77.2
89645	53181	2.27	107.2	5638.9	<1	146.9	0.19	0.82	1.56	4.1	6.3	22.51	2.39	7.6	374	0.88	17.6	0.12	300	5.97	0.083	4	0.054	30.45	2.37	21.54	1.1	23.4	63.4	0.02	4.4	0.008	0.4	1.6	9	0.4	81.1
STANDARD DS2	264	1.68	64	212.9	2	145.5	10.84	0.52	10.16	11.7	153.1	121.56	2.95	6	240	0.16	17.1	0.58	795	13.76	0.031	34.6	0.09	34.13	0.03	9.3	2.7	2.3	29.7	1.84	3.7	0.093	1.78	18.9	74	0.8	156.3

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP66733
METHOD: AAL03-0

ELEMENT	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
SAMPLES	ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
RS-494 0000-0020	176	1.11	16.1	9.8	9	168.60	0.2	0.39	0.2	4.70	10.6	19.76	2.87	5.2	678	0.23	26.8	0.22	486	3.44	0.063	9.6	0.044	56.08	0.08	5.87	2.1	0.6	59.2	<.02	11.8	0.032	0.22	2.2	27	0.8	72.6
RS-494 0020-0040	83	1.29	12.8	5.4	2	230.20	0.11	4.59	0.36	5.90	11.8	22.56	2.84	5.6	525	0.15	24.3	0.2	1022	4.38	0.045	12	0.099	87.78	0.55	3.67	3	0.5	124.9	0.03	7.6	0.018	0.15	3	54	0.8	100
RS-494 0040-0060	49	1.13	4.8	2.5	<1	73.60	0.48	3.19	0.29	6.50	6.8	11.29	2.6	4.8	123	0.12	25	0.28	1103	1.67	0.032	4	0.093	41.06	0.14	1.7	3	0.2	100.8	0.01	7.1	0.01	0.07	2.6	37	0.6	98.2
RS-494 0060-0080	53	0.98	3.2	2.1	<1	68.90	0.12	2.02	0.23	7.20	7.5	10.07	3.13	3.5	29	0.12	21.6	0.31	1162	1.83	0.039	2.9	0.086	15.85	0.05	0.46	3.9	<.1	67.6	0.02	6.2	0.048	0.04	2.6	44	0.6	94.6
RS-494 0080-0100	58	0.99	3.0	2	<1	70.40	0.11	2.22	0.22	7.20	7	14.55	3.01	3.8	39	0.12	22.3	0.31	1100	1.98	0.04	3.4	0.088	16.31	0.06	0.69	4	<.1	80.6	<.02	6	0.045	0.04	2.7	43	0.6	94.3
RS-494 0100-0120	71	0.74	8.8	5.9	<1	63.60	0.03	1.07	0.22	7.70	8	13.95	3.39	3.4	312	0.09	22.4	0.17	1199	1.58	0.026	4.1	0.099	15.17	1.77	14.87	3.4	1.1	38.6	<.02	6.5	0.025	0.15	1.6	30	1	90.5
RS-494 0120-0140	74	0.9	3.4	2.7	<1	60.70	0.03	2.26	0.22	7.10	8.2	12.35	3.14	3.7	87	0.12	20.1	0.32	1163	1.65	0.038	3.5	0.091	10	0.38	4.12	3.8	0.4	70.7	0.02	5.7	0.029	0.07	2.1	37	0.4	91.4
RS-494 0140-0160	88	0.87	11.5	10.2	<1	142.50	0.04	2.44	0.4	7.40	7.9	12.22	3.36	3.6	206	0.12	20.4	0.28	1195	1.9	0.036	3.7	0.09	24.09	1.01	5.31	3.9	0.7	75.2	0.02	5.6	0.033	0.15	2.1	39	0.4	92.8
RS-494 0160-0180	60	0.88	2.3	2.5	<1	65.90	0.05	3.16	0.28	7.30	4	9.57	2.93	4.2	59	0.12	21.2	0.27	1613	1.73	0.041	3.2	0.099	27.53	0.15	1.85	3.8	0.2	89.2	<.02	5.6	0.041	0.05	2	44	0.6	98.6
RS-494 0180-0200	118	0.95	10.8	20.2	<1	101.10	0.09	2.64	0.25	7.70	6.6	9.18	2.94	4.6	237	0.12	22.9	0.27	1961	12.78	0.037	3.8	0.095	38.41	0.61	4.6	3.4	0.9	91.2	<.02	5.9	0.028	0.13	2.1	39	0.6	110.5
RS-494 0200-0220	176	0.8	69.9	71.8	<1	54.10	<.02	1.52	0.24	8.20	5	9.32	4.41	5.4	619	0.11	20.7	0.31	786	5.48	0.028	3.7	0.099	11.4	3.91	19.88	2.4	4.8	67.6	<.02	4.6	0.016	0.32	1.6	27	0.7	91.9
RS-494 0220-0240	64	1.07	1.7	5	1	76.70	<.02	0.9	0.25	7.50	7.8	9.96	3.6	4	13	0.21	17.9	0.59	852	2.92	0.078	3.2	0.081	5.03	0.04	0.63	3.5	0.2	52.6	<.02	4.1	0.086	0.06	1.7	51	0.4	96
RS-494 0240-0260	39	1.01	1.6	2.5	2	101.90	0.02	0.99	0.23	7.50	7.3	9.98	3.67	3.9	21	0.26	18.2	0.73	872	2.72	0.1	3.5	0.068	6.38	0.06	0.34	3.3	0.3	59.1	<.02	4.4	0.089	0.08	1.9	49	0.3	93.7
RS-494 0260-0280	44	0.9	2.3	1	2	79.20	0.02	0.98	0.16	7.60	7.5	10.82	3.71	3.7	25	0.19	19	0.71	928	2.67	0.074	3.8	0.09	6.87	0.04	0.37	3.3	0.2	61.2	0.02	4.9	0.08	0.08	2.1	49	0.3	94
RS-494 0280-0300	93	1.19	2.9	26	1	74.20	<.02	1.4	0.26	7.40	6.6	14.56	3.85	4.2	12	0.16	19.9	0.68	970	2.38	0.062	3.7	0.087	5.67	0.04	0.38	3.5	0.2	79.3	0.02	5	0.073	0.05	2.3	46	0.4	96.2
RS-494 0300-0320	56	1.16	2.1	2.9	<1	43.40	0.02	1.61	0.19	7.60	2.3	6.89	3.13	6.4	16	0.09	20.4	0.46	975	2.72	0.047	1.8	0.086	6.07	0.02	0.51	3.6	0.2	92.8	<.02	5.9	0.059	0.04	2.9	48	0.6	93.2
RS-494 0320-0340	86	1.21	1.9	1.7	<1	32.70	0.04	2.25	0.27	8.30	5.3	6.5	2.81	6.9	10	0.12	26	0.31	931	1.51	0.046	1.8	0.094	6.78	0.02	0.52	3.6	0.1	136.9	<.02	7	0.033	0.05	2.9	42	0.5	93.4
RS-494 0340-0360	73	1.27	2.3	1.5	<1	39.30	0.06	2.28	0.18	6.40	3.6	4.49	3.09	5.8	7	0.13	25	0.23	1027	1.44	0.041	1.3	0.089	6.78	0.01	0.79	3.3	0.1	137.8	<.02	6.5	0.029	0.04	2.4	43	0.4	99.3
RS-494 0360-0380	53	0.85	2.6	1.6	<1	44.80	0.04	1.62	0.15	5.70	3.9	7.62	3.11	4.4	17	0.13	19.9	0.16	1692	2.67	0.066	2.1	0.074	4.85	0.01	1.08	3.3	0.2	92.7	<.02	7.1	0.078	0.06	2.7	30	0.5	93.4
RS-494 0380-0400	53	0.98	3.3	1.4	<1	60.00	<.02	1.12	0.16	2.89	1.3	5.47	2.76	5.7	11	0.18	22.3	0.17	917	1.42	0.068	1.3	0.06	6.84	0.01	1.76	1.6	0.2	95.5	<.02	10.5	0.045	0.06	1.4	7	0.6	82.1
RS-494 0400-0420	44	0.9	5.4	1.3	3	58.30	<.02	0.78	0.2	3.39	3.6	5.88	2.92	5.7	5	0.19	20.8	0.18	903	1.29	0.081	1.7	0.047	6.22	0.01	0.7	1.7	0.2	77.1	<.02	11.5	0.031	0.07	1	6	0.7	76.3
RS-494 0420-0440	44	0.79	5.6	3.1	5	76.00	0.06	0.55	0.12	3.70	6.5	15.08	3.62	5.4	11	0.27	19.6	0.17	769	2.22	0.095	4.3	0.046	6.06	0.01	1.45	1.7	0.2	63.8	<.02	11.8	0.046	0.12	1.2	8	0.8	75
RS-494 0440-0460	50	0.66	4.6	1.8	5	77.50	0.08	0.56	0.11	3.70	9.2	23.86	3.87	4.7	10	0.27	20.1	0.17	824	2.61	0.075	5.4	0.044	6.4	0.01	1.31	1.6	0.3	49.7	<.02	12	0.051	0.13	1.7	9	0.8	77.2
RS-494 0460-0480	44	0.67	6.1	11.4	2	70.10	0.09	0.62	0.12	3.40	4.8	17.79	3.84	4.2	11	0.21	22.5	0.11	726	2.91	0.088	4.7	0.041	9.21	0.02	1	1.3	0.3	60.2	<.02	10.6	0.049	0.08	1.5	9	0.7	80.5
RS-494 0480-0500	47	0.61	5.3	5.2	2	62.90	0.11	0.41	0.09	3.30	4.9	18.9	3.8	3.7	6	0.22	22.5	0.09	615	2.62	0.082	4.9	0.038	9.38	<.01	0.72	1	0.2	55.5	<.02	9.4	0.05	0.08	1.3	9	0.8	78.5
RS-494 0500-0520	56	0.65	2.6	2.8	1	118.10	0.05	0.4	0.1	3.10	3.6	11.34	3.31	5	<5	0.27	24.1	0.12	400	2.48	0.12	3.2	0.042	10.74	<.01	0.59	1.1	<.1	72.3	<.02	7.9	0.057	0.11	1.4	8	0.7	80.7
RS-494 0520-0540	79	0.74	1.6	1.7	1	171.90	0.16	0.39	0.22	4.40	5.4	20.52	3.92	5.2	8	0.28	20.9	0.18	664	3.36	0.147	6	0.046	7.42	<.01	0.69	1.2	<.1	72.3	<.02	6	0.064	0.11	1.8	11	0.7	82.3
RS-494 0540-0560	68	0.92	2.7	1.4	1	101.60	0.28	0.84	0.15	3.90	4.1	13.16	2.99	4.8	16	0.32	29.4	0.22	854	2.65	0.11	4	0.055	11.99	<.01	0.59	1.1	0.1	121.7	0.02	7.1	0.027	0.13	2.1	16	0.3	78.4
RS-494 0560-0580	74	0.92	5.4	1.6	<1	89.10	0.62	0.79	0.15	3.00	3.8	8.49	2.67	4.8	10	0.39	30.8	0.19	662	2.29	0.089	2.4	0.048	16.47	<.01	0.76	0.8	<.1	113.3	0.03	6.9	0.024	0.16	2	7	0.3	76.3
RS-494 0580-0600	84	0.9	3.8	1.5	1.0	116.70	0.2	0.71	0.16	2.30	5.4	8.4	2.65	5.2	9	0.42	31	0.14	462	2.31	0.078	2.9	0.045	15.87	<.01	0.71	0.8	0.1	94	<.02	8	0.031	0.17	2	8	0.3	78.9
RS-494 0600-0620	92	0.94	2	1	1	219.9	0.68	1.14	0.14	2.1	5.1	12.27	2.56	3.4	<5	0.32	29.9	0.22	684	2.14	0.053	3.9	0.042	12.22	<.01	0.41	0.5	<.1	245.9	0.02	5.2	0.005	0.11	1.2	3	0.2	63.1
RS-494 0620-0640	102	1.02	2.1	1.2	<1	92.8	0.26	1.55	0.18	2.8	3.4	7.09	2.14	4.9	<5	0.38	38.9	0.18	630	1.97	0.052	2.3	0.062	18.57	<.01	0.59	0.7	<.1	141.3	<.02	6.2	0.068	0.14	1.6	5	0.3	65.5
RS-494 0640-0660	87	0.93	1.5	1	<1	82.6	0.19	1.48	0.13	1.5	2.9	7.07	1.65	4.2	10	0.41	43.6	0.14	662	1.96	0.049	1.7	0.031	32.48	<.01	0.6	0.6	<.1	116.4	0.02	6.5	0.068	0.13	1.1	2	0.3	61.7
STANDARD DS2	224	1.71	58.3	193.3	<1	150.3	10.33	0.54	9.84	12.2	169.1	127.15	3.1	6.2	223	0.16	15.3	0.61	833	14.15	0.032	35.7	0.085	31.81	0.05	9.34	2.7	2.2	28	1.8	3.6	0.093	1.79	18.4	73	6.4	160.3
RS-494 0660-0680	122	0.87	1.8	2.9	<1	92.7	0.72	2.19	0.38	2	2.5	7.11	1.63	3.7	16	0.38	37.8	0.12	720	1.94	0.06	1.5	0.053	24.16	11.67	1.38	0.4	0.3	128.1	0.03	6.1	0.008	0.16	1.7	2	0.2	53.3

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

CLIENT: HECLA MINING CO.
CLIENT REF: KURT ALLEN
AAL REF: SP66733
METHOD: AAL03-0

ELEMENT SAMPLES	Ag ppb	Al %	As ppm	Au ppb	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	Se ppm	Sr ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RS-494 0680-0700	94	0.82	1	1.9	<1	68	0.17	2.09	0.22	2.4	1.5	4.61	1.63	3.6	39	0.34	36.2	0.1	652	1.54	0.044	0.7	0.055	20.12	9.62	1.06	0.4	0.2	127	0.02	4.9	0.009	0.11	1.3	2	0.2	83
RS-494 0700-0720	93	0.85	1.3	0.8	<1	133.3	0.12	1.57	0.18	1.6	2.4	7.16	1.84	3.2	11	0.36	35.3	0.08	488	2.42	0.063	1.4	0.048	20.38	7.99	0.7	0.4	0.1	95.7	0.02	6.3	0.03	0.09	1.2	3	0.5	66.8
RS-494 0720-0740	88	0.62	1.3	1.1	<1	110.8	0.06	2.3	0.15	1.8	3.1	5.62	1.98	2.9	28	0.31	32.2	0.07	744	2.87	0.041	1	0.049	16.83	8.74	0.66	0.5	<.1	132.5	<.02	5.4	0.028	0.08	1.2	3	0.3	71
RS-494 0740-0760	82	0.77	0.9	0.8	<1	113.6	0.08	2.06	0.19	2.8	3.7	5.94	1.98	3.3	27	0.34	32.6	0.12	811	2.65	0.048	1.4	0.052	17.2	7.63	0.83	0.5	0.1	114.6	<.02	5.7	0.02	0.11	1.2	3	0.2	71.8
RS-494 0760-0780	1471	0.86	35.6	36.1	<1	95.7	0.1	1.9	0.2	5.7	4.2	7.18	2.66	3.1	103	0.39	17.2	0.1	1396	3.24	0.016	1.2	0.046	18.82	6.59	12.04	0.4	3.9	99.7	<.02	2.9	0.001	0.57	0.6	2	0.2	92.3
RS-494 0780-0800	2696	0.64	58	43.9	<1	101	0.88	0.24	0.12	2.7	2.9	9.28	2.37	2.1	152	0.39	17.9	0.02	147	2.48	0.011	1.8	0.043	18.84	7.97	9.9	0.3	7	39.8	<.02	3.9	0.001	0.49	0.4	2	0.3	71.3
RS-494 0800-0820	1806	0.61	90.2	54.2	<1	109.3	0.71	0.14	0.13	2.3	6.1	14.1	2.77	2.5	564	0.32	16.4	0.02	134	3.92	0.01	3	0.019	13.38	8.13	8.76	0.4	4.9	32.8	<.02	4.2	0.001	0.4	0.6	3	0.4	69.1
RS-494 0820-0840	8637	0.38	132.6	74.2	<1	35.2	0.1	0.27	0.17	2.3	6.6	17.3	3.33	1.7	716	0.19	12.4	0.02	142	4.46	0.009	3.9	0.029	14.16	9.14	10.54	0.2	5.6	33.1	<.02	3.4	<.001	0.34	0.5	5	0.8	64.8
RS-494 0840-0860	3708	0.48	134.7	92	2	42.8	0.07	0.17	0.11	2.9	7.5	18.49	3.18	2	255	0.24	14.6	0.02	136	3.76	0.011	3.8	0.038	14.9	11.19	13.56	0.3	9.7	38.3	0.05	4	<.001	0.56	0.6	4	0.4	63.8
RS-494 0860-0880	18352	0.49	282.5	104	<1	62.3	0.1	0.11	0.16	2	10.6	33.07	3.49	2.4	220	0.26	12.2	0.02	190	4.56	0.009	6.4	0.014	14.51	3.97	22.16	0.4	14.2	28.1	0.05	2.8	<.001	0.36	0.5	6	0.6	44.7
RS-494 0880-0900	979	0.29	89.4	33	<1	142.4	0.35	0.09	0.25	0.6	6	17.44	2.23	1.2	272	0.21	18.5	0.01	103	2.54	0.006	2.9	0.004	17.03	2.61	5.86	0.2	5.9	28.6	0.03	5.1	<.001	0.26	0.5	3	0.2	63.2
RS-494 0900-0920	631	1.11	11.7	17.2	<1	46	0.07	0.07	0.12	0.4	4.3	9.47	1.56	3.9	332	0.49	22.5	0.02	96	1.96	0.011	2.5	0.003	19.19	3.79	3.32	0.3	2.7	24	<.02	7.3	0.001	0.18	0.8	2	0.2	58.6
RS-494 0920-0940	666	0.41	14.6	18.6	<1	22.8	0.05	0.08	0.07	0.6	6.1	13.97	2.1	1.8	437	0.28	22.2	0.01	114	2.76	0.01	3.8	0.003	16.15	3.93	4.85	0.2	2.2	28.3	0.02	7.7	<.001	0.29	0.9	3	0.2	53.8
RS-494 0940-0960	591	0.28	18.8	29.7	<1	104.9	0.02	0.08	0.09	0.5	6.5	10.1	1.98	0.9	238	0.23	22.3	0.01	95	3.32	0.009	3.3	0.004	22.01	3.81	4.54	0.2	4	28.5	<.02	7.7	<.001	0.21	1.1	2	0.2	54.4
RS-494 0960-0980	553	0.26	33.4	21.5	<1	18.2	0.02	0.08	0.06	0.4	3.1	8.44	1.75	0.9	127	0.22	21.9	0.01	80	4.48	0.009	2.8	0.003	18.67	3.62	3.77	0.2	4.2	28.7	<.02	7.6	<.001	0.14	1	2	0.2	54.4
RS-494 0980-1000	1778	0.29	46.2	34.4	<1	40.3	<.02	0.08	0.08	0.3	2	5.71	1.66	1.1	531	0.26	25.2	0.01	65	2.4	0.009	1.9	0.003	19.08	4.07	33.89	0.2	6.6	26.7	<.02	9.3	<.001	1.48	1.3	2	0.2	54.7
RS-494 1000-1020	264	0.44	5.1	8.7	<1	21	<.02	0.7	0.1	0.3	4.2	5.03	1.46	1.9	38	0.33	30.2	0.01	641	1.5	0.019	1.7	0.004	21.04	7.38	2.4	0.3	1.7	48	<.02	10.7	<.001	0.19	2.6	<2	<.2	71.2
RS-494 1020-1040	216	0.69	5	4.7	<1	17.2	<.02	0.74	0.08	0.3	4	5.93	1.58	3.4	29	0.4	32.4	0.02	671	1.37	0.035	1.8	0.005	19.11	7.79	1.56	0.4	0.9	50.5	<.02	11.6	<.001	0.13	3.4	2	<.2	73.6
RS-494 1040-1060	118	0.63	2.3	1.7	<1	16.6	<.02	0.73	0.07	0.2	3.2	4.59	1.24	4	19	0.35	41.6	0.02	765	1.04	0.044	1.1	0.005	21.88	8.19	0.67	0.6	0.4	47.5	<.02	13.9	0.001	0.09	1.5	<2	<.2	69.1
RS-494 1060-1080	133	0.57	5.4	3.2	<1	13.8	<.02	0.61	0.08	0.3	2.3	4.25	1.18	3.5	19	0.34	45.8	0.02	622	1.09	0.043	1.2	0.006	21.23	8.59	0.94	0.5	0.8	47.9	<.02	14.9	0.001	0.09	1.7	2	<.2	65.4
RS-494 1080-1100	215	0.61	5	2.4	<1	16.1	<.02	0.6	0.09	0.3	2.8	4.3	1.21	3.9	18	0.33	45.6	0.02	987	1.01	0.038	1.2	0.006	24.79	8.23	1.03	0.5	0.7	43.1	<.02	14.8	<.001	0.09	1.8	<2	<.2	69.1
RS-494 1100-1120	192	0.64	6.1	3.1	<1	20.2	<.02	0.43	0.1	0.5	4.6	5.65	1.35	4.2	26	0.33	48.6	0.02	1014	1.47	0.042	1.5	0.006	31.65	8.6	0.88	0.6	0.7	41.1	<.02	14.9	0.001	0.09	2	<2	<.2	80
RS-494 1120-1140	118	0.73	1.8	0.4	<1	16.3	<.02	0.44	0.09	0.6	3.2	7.26	1.58	6.4	16	0.34	60.9	0.02	1168	1.27	0.059	1.6	0.007	26.08	10.18	0.57	0.7	0.3	37.5	<.02	16.4	0.001	0.08	1.7	<2	0.2	75.3
RS-494 1140-1160	209	0.56	3.8	4.6	<1	12.7	<.02	0.67	0.11	0.8	7.9	12.99	1.72	3.2	37	0.32	40.9	0.02	686	2.27	0.061	3.1	0.005	24.24	9.12	0.69	0.4	0.4	56.5	<.02	14	0.001	0.09	2.3	3	0.2	66.8
RS-494 1160-1180	229	0.79	11.8	5.9	<1	15.7	0.02	0.53	0.1	0.8	6.8	18.67	1.38	4.6	30	0.43	42.4	0.02	690	1.98	0.052	2.4	0.005	22.98	9.3	1.04	0.5	1.1	48.1	<.02	14.7	0.001	0.13	2.2	2	0.2	69.2
RS-494 1180-1200	160	0.81	2.9	1.2	1	12.8	<.02	0.44	0.12	0.8	6.7	9.21	1.4	4.8	22	0.43	44.8	0.02	708	2.01	0.06	2	0.005	21.01	8.84	0.63	0.5	0.6	52.5	<.02	15.2	0.001	0.12	2.6	2	0.2	70.9
89696 N S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDARD DS2	237	1.75	60.5	207.9	4	154.7	11.28	0.56	9.98	12.3	164.7	130.68	3.16	6.4	232	0.17	17.3	0.61	841	14.93	0.033	36.5	0.093	32.46	7.87	9.77	2.8	2.3	29.8	1.85	3.9	0.098	1.86	19.1	76	6.6	162.2

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

Zacatecas Office
Telephone/Fax
011-52-49-234530

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: N. Equinox Purchase Order Number:

Date Submitted: 5 Apr 2000 Number of Samples: 177

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

SAMPLE IDENTIFICATION	TYPE	ELEMENTS REQUIRED
Drill Hole RS-496 0 - 885	RC	Au & Ag - Use Rosebud Exploration Protocol Sample Prep & Assay
Note: Please make up 20 ft composits of the Pulps for ICP + Se Trace elements		
1 (one) Pulp - Rose bud Production Standard @ end of run		

COARSE REJECTS (Normally Discarded After 60 Days)

[ ] 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
P.O. Box 2610
Winnemucca, NV 89446

Results to:

Kurt Allen
— Same —

Comments:

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