60000809

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud Drill Hole File - Hole No. D-6-94
AUTHOR	C. Winchester; C. Muerhoff; S. Faircloth
DATE OF DOC(S)	1994
MULTI_DIST Y / N? Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Hecla Mining Co.; Rosebud Project South Zone
COMMODITY If not obvious	gold; silver
NOTES	drill logs; geology; assay; total depth 220' receipt, handwritten notes 12p.

Keep docs at about 250 pages if no oversized maps attached (for every 1 oversized page (>11x17) with text reduce the amount of pages by ~25)

SS: DD 4/30/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

D-6-94 southzone

6000 0809
4010

6060 0809

Hecla
MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-6-94	LOCATION	STATION #4 South Zone	REMARKS	Quick log re-write
PAGE 1 OF		NORTHING	2203406.9		Note "Cu" drilling grease used
DATE	(10/29/94)	EASTING	481362.8		
LOGGED BY	LJB	ELEVATION	4734.8		
SCALE	1" = 10'	AZIMUTH	133.0°		
TOTAL DEPTH	220	INCLINATION	+49.5°		

%REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		0-20 Med gy ashy Tuff, laminated bedding, some zones w/ angular clasts poss. due to slumping				0-20 wk-mod sil-arg alt, white clay film on frac, minor chl on frac
			10			
						14-20 wk hydrobx(?) cemented by calcite, qtz ± pyrite (fine)
		20-54.5 Clast supported volcanic breccia. Med gray + white heterolithic? clasts (some foliated others plain) 1/10 - 1" Angular to sub-Angular clasts.	20		20.5-23 frac zone	20-54.5 Hairline py veinlets, minor calcite in matrix, white clays on frac, mod sil/wk arg clasts
			30			
					37.7-38.3 frac zone	
			40			
			50			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
0	5	5	.025		.022	
5	10	5	.014			
10	15	5	.010			
15	20	5	.010			
20	25	5	.004			
25	30	5	.008			
30	35	5	.019			
35	40	5	.011			
40	45	5	.006			
45	50	5	.005			
50	54.5	4.5	.008			

HOLE NUMBER D-6-94 PAGE 2 OF 4

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		54.5 - 109.5 White homolithic volcanic breccia composed of white angular foliated, with slumps, clast-supported	60 70 80 90 100 110 120			54.5 - 109.5 Mod-str sil ashy matrix, wk avg clasts. hairline clay vnlets, discontinuous hairline pyrite vnlets, minor calcite in matrix, Ca-rich clays 84-100 1/10-1/4" calcite vnlets ± pyrite @10 94 1 1/2" ca vning w/ minor py @ 40-50 95-97.5 calcite vn @ 40 w/ minor py 97. 2" ca vn @50							
		109.5-139 lt gy ashy tuff w/ local foliation @10-30 sometimes w/ slump structures				109.5 - 139 fine py dissem, white calcareous vnlets + films on frac ± py, str sil, minor calcite vnlets ± py @15							

HOLE NUMBER D-6-94 PAGE 3 OF 4

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		SEE ABOVE				SEE ABOVE							
			130		133-137 frac zone		135	139	4	.014			
		139-169 H-med gray heterolithic fine matrix supported Volcanic breccia (10% matrix)	140		mod Argillic	139-167 calcareous white clay on frac and locally in matrix 1/20" calcite veinlets ± py mod py dissem mod argillic alt	139	142	4	.173			
							142	145	3	.085			
							145	150	5	.303			
			150		150.5 6" frac zone		150	155	5	.186			
							155	157.5	2.5	.096			
			160			157.5-160 str carbon on frac, poss blue/green CuOx soaking into clasts	157.5	160	4.5	.347			
							160	165	5	.014			
						160-169 additional chl veinlets + frac coat							
		169-180 H-med gray ashy tuff w/ minor clastic zones	170			169-180 white clay films on frac, py veinlets @ 0° discontinuous hairline chl veinlets, fine py dissem.							
		180-188.5 (190) H med gray matrix supported Volcaniclastics 1/10-1/4" glassy shards (homolithic)	180			180-188.5 py dissem matrix mod Argillic, discontinuous Calcite/py veinlets @ 40							
			190		188.5-190 str frac zone	188.5-190 mod-str Argillic							

HOLE NUMBER D-6-94 PAGE 4 OF 4

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		190 - 207.3 Matrix supported volcaniclastics, sub-rounded heterolithic clasts, brown fine grain hematitic matrix 1/10-2" clasts	200			190-207.3 minor chl alt green chl clasts							
		207.3 - 211.3 green chl tuff w/ minor clastics	210										
		211.3 - 220 Foliated Ashy tuff, brown-green matrix + white/gy flatted shards @30, almost spotted texture	220										
			EOH										

Hecla
MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-6-94	LOCATION	STATION #4	REMARKS	Quick log
PAGE 1 OF 1		NORTHING			
DATE	10/25/94	EASTING			
LOGGED BY	LJB	ELEVATION			
SCALE		AZIMUTH			
TOTAL DEPTH	220	INCLINATION	+52		

%REC | RQD | LITHOLOGY | FT | GRAPHIC LOG | ~~STRUCTURE~~ | ~~ALTERATION AND MINERALIZATION~~

Copper drilling muds used

0-20 Med gray ashy Tuff, laminated bedding some zones of angular clast poss due to slumping. wk-mod sil-Argillic, white clay films on fractures. wk hydrobx? cemented by calcite + qtz ± pyrite (fine) [14-20 ft] minor chl on frac

20-54.5 clast supported volcanic breccia. Med gray + white heterolithic clasts (some foliated other plain) 1/10 to 1" Angular to subangular clast, Hairline py vnlets, minor calcite in matrix, white clays on fractures mod-str silica, wk Argillic clasts.

20.5-23 frac zone
37.7 38.3 frac zone

54.5-109.5 white homolithic volcanic breccia composed of white angular foliated slumped fragments. Mod-str sil ashy matrix, wk argillic clasts hairline clay vnlets, discontinous hairline py vnlets. minor calcite in matrix, Ca clays

84-100 1/10 - 1/4" calcite vnlets ± pyrite @ 10.

94 1 1/2" calcite vn w/minor py @ 40-50

95.-97.5 calcite vn @ 40 w/minor py ; 97: 2" calcite vn @ 50

109.5-139 Lt gray Ashy Tuff w/ local foliation @ ~10-30 some times will slump structures fine py dissem white calcareous vnlets + films on frac ± py str silicic, minor calcite vnlets ± py @ 15

133-137 fracture zone

* 139-169 Lt-Med gray heterolithic fine matrix supported volcanic breccia (10% matrix) Calcareous white clay on fractures and locally in matrix. 1/20 calcite vnlets ± py, mod py dissem; mod argillic

~150.5 6" frac zone

* 157.5-160 str carbon on fractures, poss blue/green Cu ox soaking into clasts.

160-169 additional chl vnlets + frac coating

169-180 H-Med gray Ashy tuff w/ minor clastic zones Mod Argillic, white clay films on frac Minor calcite ± py vnlets @ 0, discontinous hairline chl vnlets., fine py dissem.

180-188.5 (190) H-Med gray Matrix supported volcaniclastic 1/10 - 1/4" glassy shards (homolithic) fine Ashy matrix w/ py dissem. Mod Argillic, discontinous ca/py vnlets @ 40

188.5-190 strong frac zone, Mod-str Argillic rocks Appear similar to above

190-207.3 Matrix supported volcaniclastics, sub-rounded heterolithic clasts, brown fine grain hemitite matrix, minor chl alt., green chl clasts, white + brown clasts. 1/10 - 2" clasts

207.3-211.3 Green chloritic Tuff, ashy with some clastic components.

211.3-220 EOH Foliated Ashy tuff, brown to green matrix and white/gray flattened shards @ 30, Almost spotted texture

From	To	W	Au	Ag
160	165	5	.014	
165	169	4	.030	
169	175	6	.017	
175	180	5	.026	
180	185	5	.007	
185	190	5	.049	
190	195	5	.015	
195	200	5	.013	
200	205	5	.006	

From	To	W	Au	Ag
205	208	3	.006	
208	211.5	3.5	.007	
211.5	215	2.5	.007	
215	220	5	.004	

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
0	5	5	.025		.022	
5	10	5	.014			
10	15	5	.010			
15	20	5	.010			
20	25	5	.004			
25	30	5	.008			
30	35	5	.019			
35	40	5	.011			
40	45	5	.006			
45	50	5	.005			
50	54.5	4.5	.008			
54.5	60	5.5	.015			
60	65	5	.010			
65	70	5	.005			
70	75	5	.004		.004	
75	80	5	.009			
80	85	5	.008			
85	90	5	.007			
90	95	5	.007			
95	100	5	.025			
100	105	5	.006			
105	109.5	4.5	.006			
109.7	115	5.5	.004			
115	120	5	.007			
120	125	5	.007			
125	130	5	.010			
130	135	5	.016			
135	139	4	.014			
139	142	4	.173			
142	145	3	.085			
145	150	5	.303	24' @ .223		
150	155	5	.186			
155	157.5	2.5	.096			
157.5	160	4.5	.387			

ANALYSIS REPORT

American Assay Laboratories

P.O. BOX 71060
RENO, NV,,U.S.A.,
Ph.1-702-356-0606, Fax.1-702-356-1413
Telex:

HECLA MINING CO.

COPIES TO : CHARLIE MUERHOFF
:
:
:

CLIENT REFERENCE No: D-6-94
LABORATORY JOB No. : SP031539
SAMPLE TYPE :

RECEIVED : 7 NOV 1994
REPORTED : 14 NOV 1994
No. SAMPLES : 47

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT.	DETECTION
Au(OZ)	FA60	15%	OPT	0.001
Au(RZ)	FA60	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

OK to pay
140140-477
GA

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-6-94
JOB NUMBER : SP031539
REPORTED : 14 NOV 1994

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-6-94 00-05	0.025	0.022		1.78
D-6-94 05-10	0.014			0.12
D-6-94 10-15	0.010			0.29
D-6-94 15-20	0.010			2.28
D-6-94 20-25	0.004			0.56
D-6-94 25-30	0.008			0.27
D-6-94 30-35	0.019			0.46
D-6-94 35-40	0.011			0.21
D-6-94 40-45	0.006			0.64
D-6-94 45-50	0.005			0.07
D-6-94 50-54.5	0.008			0.05
D-6-94 54.5-60	0.015			0.05
D-6-94 60-65	0.010			0.06
D-6-94 65-70	0.005			0.04
D-6-94 70-75	0.004	0.004		0.04
D-6-94 75-80	0.009			0.04
D-6-94 80-85	0.008			0.04
D-6-94 85-90	0.007			0.05
D-6-94 90-95	0.007			0.04
D-6-94 95-100	0.025			0.04
D-6-94 100-105	0.006			0.02
D-6-94 105-109.5	0.006			0.07
D-6-94 109.5-115	0.004			0.09
D-6-94 115-120	0.007			0.14
D-6-94 120-125	0.007			0.20

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-6-94
JOB NUMBER : SP031539
REPORTED : 14 NOV 1994

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-6-94 125-130	0.010			0.27
D-6-94 130-135	0.016			2.00
D-6-94 135-139	0.014			0.42
D-6-94 139-142	0.173		0.183	9.64
D-6-94 142-145	0.085		0.083	1.46
D-6-94 145-150	0.303		0.346	1.76
D-6-94 150-155	0.186		0.161	0.42
D-6-94 155-157.5	0.096		0.092	0.16
D-6-94 157.5-160	0.347		0.424	7.02
D-6-94 160-165	0.014			0.27
D-6-94 165-170	0.030			0.68
D-6-94 170-175	0.017			0.74
D-6-94 175-180	0.026			0.63
D-6-94 180-185	0.007			0.11
D-6-94 185-190	0.049		0.053	0.30
D-6-94 190-195	0.015			0.10
D-6-94 195-200	0.013			0.08
D-6-94 200-205	0.006			0.06
D-6-94 205-208	0.006			0.10
D-6-94 208-211.5	0.007			0.14
D-6-94 211.5-215	0.007			0.08
D-6-94 215-220	0.004			0.09

SAMPLE SUBMITTAL FORM

American Assay Laboratories Inc.

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

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

Company: Hecla Mining Co

Address:

Telephone Number: ( ) Fax Number: ( )

Project Name: Rosebud Purchase Order Number:

Transport Company: Waybill Number:

Date Shipped: 10/31/94 Number of Packages: 47 [ ] Prepaid [ ] Collect

ANALYSIS REQUIRED

SAMPLE				TYPE	ELEMENTS REQUIRED
0-5	75 - 80	145 - 150	211.5-215	CORE	Au & As 2 AT FA
5-10	80 - 85	150 - 155	215-220 (EOH)		w/ Hecla/Rosebud custom prep
10-15	85 - 90	155 - 157.5			
15-20	90 - 95	~~155~~ 157.5 - 160			
20-25	95 - 100	160 - 165			* if Au ≥ .05 OPT
25-30	100 - 105	165 - 170			then repeat grav. finish
30-35	105 - 109.5	170 - 175			
35-40	109.5 - 115	175 - 180			
40-45	115 - 120	180 - 185			
45-50	120 - 125	185 - 190			
50-54.5	125 - 130	190 - 195			
54.5-60	130 - 135	195 - 200			
60-65	135 - 139	200 - 205			
65-70	139 - 142	205 - 208			
70-75	142 - 145	208 - 211.5			

COARSE REJECTS (Normally Discarded)

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

PULPS (Normally Stored Free For One Month)

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

RESULTS AND INVOICES TO BE SENT TO:

Please mark invoice person and address [I]

(1) Charlie Muerhoff

(2)

(3)

Comments:

CLIENT FILE COPY

PROVISIONAL REPORT

P.O. BOX 71060
RENO, NV,,U.S.A.,
Ph.1-702-356-0606, Fax.1-702-356-1413
Telex:

FECLA MINING CO.

COPIES TO : CHARLIE MUERHOFF
:
:
:

CLIENT REFERENCE No: D-6-94 RECEIVED : 7 NOV 1994

LABORATORY JOB No. : SP031539 REPORTED : 14 NOV 1994

SAMPLE TYPE : No. SAMPLES : 47

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA60	15%	OPT	0.001
Au(RZ)	FA60	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-6-94
JOB NUMBER : SP031539
REPORTED : 14 NOV 1994

SAMPLE	Au(OZ)	Au(OZ)	AU GRAV	Ag(OZ)
D-6-94 00-05	0.025	0.022		1.78
D-6-94 05-10	0.014			0.12
D-6-94 10-15	0.010			0.29
D-6-94 15-20	0.010			2.28
D-6-94 20-25	0.004			0.56
D-6-94 25-30	0.008			0.27
D-6-94 30-35	0.019			0.46
D-6-94 35-40	0.011			0.21
D-6-94 40-45	0.006			0.64
D-6-94 45-50	0.005			0.07
D-6-94 50-54.5	0.008			0.05
D-6-94 54.5-60	0.015			0.05
D-6-94 60-65	0.010			0.06
D-6-94 65-70	0.005			0.04
D-6-94 70-75	0.004	0.004		0.04
D-6-94 75-80	0.009			0.04
D-6-94 80-85	0.008			0.04
D-6-94 85-90	0.007			0.05
D-6-94 90-95	0.007			0.04
D-6-94 95-100	0.025			0.04
D-6-94 100-105	0.006			0.02
D-6-94 105-109.5	0.006			0.07
D-6-94 109.5-115	0.004			0.09
D-6-94 115-120	0.007			0.14
D-6-94 120-125	0.007			0.20

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-6-94
JOB NUMBER : SP031539
REPORTED : 14 NOV 1994

D-6-94 125-130	0.010		0.27
D-6-94 130-135	0.016		2.00
D-6-94 135-139	0.014		0.42
D-6-94 139-142	0.173	0.183	9.64
D-6-94 142-145	0.085	0.083	1.46
D-6-94 145-150	0.303	0.346	1.76
D-6-94 150-155	0.186	0.161	0.42
D-6-94 155-157.5	0.096	0.092	0.16
D-6-94 157.5-160	0.347	0.424	7.02
D-6-94 160-165	0.014		0.27
D-6-94 165-170	0.030		0.68
D-6-94 170-175	0.017		0.74
D-6-94 175-180	0.026		0.63
D-6-94 180-185	0.007		0.11
D-6-94 185-190	0.049	0.053	0.30
D-6-94 190-195	0.015		0.10
D-6-94 195-200	0.013		0.08
D-6-94 200-205	0.006		0.06
D-6-94 205-208	0.006		0.10
D-6-94 208-211.5	0.007		0.14
D-6-94 211.5-215	0.007		0.08
D-6-94 215-220	0.004		0.09