6000 0949

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-D 389-99
AUTHOR	D. Mackerrow; K Allen
DATE OF DOC(S)	1999 -2000
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Rosebud Mining Co., LLC Hecla Mining Co.; Dark Zone
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; [redacted]; total depth 90' receipt; handwritten notes; downhole camera images photographs; down hole survey 18p. 1 down hole camera images

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

Revised: 1/22/08

	Initials	Date
SS:	DD	5/12/08
DB:	mah	
SCANNED:		

RS- D389-99

6000 0949

4010

60000949

Hecla MINING COMPANY

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

Barite stibnite

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	RS-D389-99	LOCATION	Dark Zone Section -50
PAGE	1 OF 2	NORTHING	
DATE	12/19/99	EASTING	
LOGGED BY	D.G. Mackerrow	ELEVATION	
SCALE	1" = 10'	AZIMUTH	S 30E
TOTAL DEPTH	90	INCLINATION	90

REMARKS

LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
ALS	R	0-7.8 ALS PHILLITIC SHALE AND FINE GRAINED INTRUSIVE silicified shale and intrusives along fault boundary			0-7.8 Highly fractured and silica flood Fault from 2-4 and 6-7.	0-7.8 white clay with pyrargyrite on fractures Marcasite in quartz veins, stibnite also on the fractures
TCS		7.8-55.1 TCS SILTY SANDSTONE AND EPICLASTIC SEDIMENTS 7.8-14.3 Highly sheared Epiclastic sediments weakly clorific. conglomerate, sandstone and clay stone 14.7 Medium grained sandstone Grades into silty sandstone by 17! Pine 20 wht clay Fr 52-55.1 TCS Epiclastic steeply dipping and sheared along lower contact	10 20 30 40 50		8.8-13.8 Fault zone rubble breccia 17.5-20.9 Fracture zone with increasing quartz stock work 19-30 is a crackle breccia/fracture zone. Stock works of quartz veins surround crackle Bxg 30-35 weak quartz veining 37.7-39.6 Fracture zone filled with white clay 39.6-43.8 Increasing fracturing to breccia at 43.8. Footwall at ≈ 40 ot ca	17.5-20.9 Fracture zone white clay Marcasite 20.9-23.9 silica leak / breccia py after marcasite stibnite on fracture with white 23.9-26.3 weak stockwork stock work with pyrite and pyrite after marcasite 26.3-30 Quartz stock work stibnite white clay 30-37.7 weak to moderate quartz stockwork with py after marcasite 37.7-39.6 Highly fracture with white clay expanding fx marcasite and pyrite in clay 43.8-48 weak quartz veins marcasite in vugs 48-50 0° tca marcasite quartz vein

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag
0	5					
5	7.8					
7.8	8.8					
8.8	10					
10	13.8					
13.8	17.5					
17.5	20.9					
20.9	23.4					
23.4	26.3					
26.3	30					
30	35					
35	37.7					
37.7	39.6					
39.6	43.8					
43.8	48					
48	50					
50	52					

HOLE NUMBER RS-D389-99 PAGE 2 OF 2

ITH.	OX/RED.	LITHOLOGY
TCS	R	7.8-55.1 TCS. SANDSTONE AND EPICLASTIC SEDIMENTS
Td	R	55.1-71 DOZER Fine grained rhyolite, Rock is argillized and locally highly sheared in faults. Color is greenish blue gray in color. Marcasite crystals masses are disseminated of 1-2%. 61-63 Brown auto breccia texture.
TCS Ei		71-78.5 TCS EPICLASTIC SEDIMENTS Sediments consists of clay stones and pea size conglomerate. Traces of chloritic alteration.
		78.5-80.7 DOZER FAULTED BLOCK 80.7-82.4 TCS EPICLASTIC SEDS Faulted Block Port 75.9-76.3 mainly quartz to 81.4-82 82.4-90 DOZER Fine grained rhyolite Partially silicified TD 90

FT

GRAPHIC LOG

STRUCTURE	ALTERATION AND MINERALIZATION
55.1 40° tca contact with slickenside dip 30° tcs	52-55.1 Sheared Sediments white clay and quartz with X cutting pyrite/ marcasite veins
61.-30° tca Fault + highly sheared Dozer. Hanging wall looked like auto bxa but 30° tca upper surface	55.1-71 Barite crystals in all vugs.
71 20° tca Fault contact with tcs	64.5 1" Barite vein with marcasite crystals. Pyrite forms small botryoidal (rounded) masses
80.7 Fault contact with Tcs	65-71 Bleached white Argillized Dozer
82.4-89 Dozer is highly brecciated and healed by silica	83.5-85.4 Heavy marcasite crystal in silica.

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
52	55.1				
55.1	58				
58	61				
61	65				
65	70				
70	71				
71	75				
75	78.5				
78.5	80.7				
80.7	82.4				
82.4	83.5				
83.5	85.4				
85.4	90				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D389-99 DATE: 12-19-99 LOGGED BY: D.G. MacKerron PAGE 1 OF 2

DRILL RUN		SOLID CORE	TOTAL CORE	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO	RECOVERY (%)	RECOVERY (%)		DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
0	5	0	100	100										
5	10	70	100	94										
10	15	100	106	24										
15	20	88	100	70										
20	25	86	104	80										
25	30	100	100	90										
30	35	100	104	80										
35	40	82	100	70										
40	45	100	100	74										
45	50	100	102	56										
50	55	100	100	82										

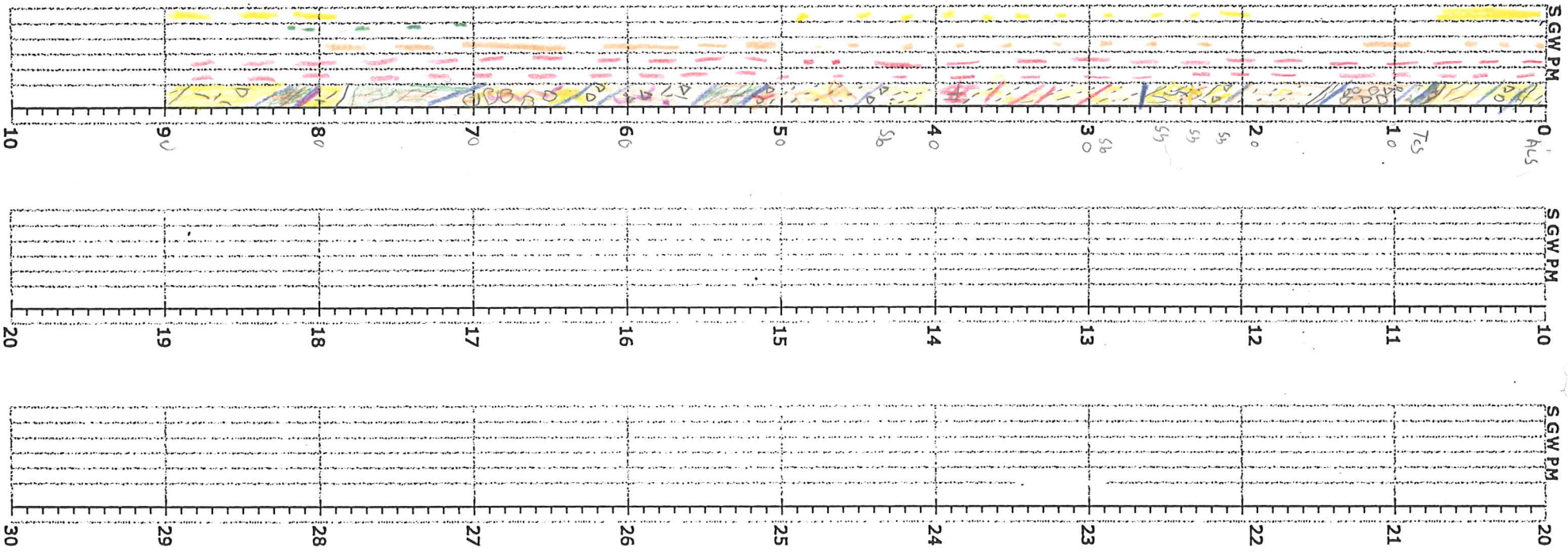
HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D389-99 DATE: 12-19-99 LOGGED BY: D.G. Mackerron PAGE 2 OF 2

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	ROD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
55	60	98	100	98										
60	65	100	100	58										
65	70	100	100	64										
70	75	100	100	80										
75	80	100	102	88										
80	85	100	100	88										
85	90	100	100	72										

ROSEBUD MINING COMPANY, LLC.

	COLLAR COORDINATES	START HOLE 12/20/99	FINISH HOLE 12/20/99	HOLE # RS-12389-94
	NORTH	HOLE TYPE Core	LOGGED BY D.G. Mackerrow	
	EAST	BEARING 140	ANGLE 30.5	T.D 90
	ELEV			
DRILLING CO. Action	DRILLER Goddy	PAGE 1 OF 1	SURVEYED TO 90	



ALTERATION INTENSITY

1 WEAK 2 MODERATE 3 STRONG

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

GRAPHIC LOG

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

Intrusive

ALTERATION
Silicification
Argillization
Barite
Sulfide
Chlorite

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES

840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Certificate of Analysis

DATE: Monday, January 10, 2000

JOB NO: 99-51-77

CLIENT: Hecla (Rosebud Mine)
P.O. Box 2610
Winnecmucca, NV 89446 US

INVOICE NO: 33100358

RS-D359

CLIENT ORDER NO:

REPORT ON: 31 Core

SUBMITTED BY: Kurt Allen

DATE RECIEVED: Tuesday, December 21, 1999

ANALYSES: Rosebud Mine Development Protocol

ANALYTICAL METHODS: Fire Assay, Fire/AA

REMARKS:

In Database

CC: RMG File

E-MAILED TO:

CLIENT: Hecla (Rosebud Mine)

JOB NO.: 99-51-77

99-51-77	Sample Designation	Gold Fire/AA ppb	Gold Fire/AA oz/ton	Gold Fire Assay oz/ton	Silver Fire/AA ppm	Silver Fire/AA oz/ton	Silver Fire Assay oz/ton
1	RS-D389-99 0'-5'	821	0.024		32.2	0.94	
2	RS-D389-99 5'-7.8'	1285	0.038		31.5	0.92	
3	RS-D389-99 7.8'-8.8'	177	0.005		6.9	0.20	
4	RS-D389-99 8.8'-10'	167	0.005		9.0	0.26	
5	RS-D389-99 10'-13.8'	148	0.004		5.4	0.16	
6	RS-D389-99 13.8'-17.5	614	0.018		5.8	0.17	
7	RS-D389-99 17.5'-20.9	1658	0.048	0.035	61.6	1.80	1.69
8	RS-D389-99 20.9'-23.4	855	0.025		23.3	0.68	
9	RS-D389-99 23.4'-26.3	1675	0.049	0.078	13.2	0.39	0.57
10	RS-D389-99 26.3'-30'	3052	0.089	0.039	97.3	2.84	2.96
11	RS-D389-99 30'-35'	647	0.019		7.5	0.22	
12	RS-D389-99 35'-37.7'	1249	0.036		19.9	0.58	
13	RS-D389-99 37.7'-39.6	488	0.014		8.7	0.26	
14	RS-D389-99 39.6'-43.8	2021	0.059	0.051	138.0	4.03	10.26
15	RS-D389-99 43.8'-48'	449	0.013		58.6	1.71	
16	RS-D389-99 48'-50'	649	0.019		40.4	1.18	
17	RS-D389-99 50'-52'	614	0.018		177.4	5.18	
18	RS-D389-99 52'-55.1'	854	0.025		149.7	4.37	
19	RS-D389-99 55.1'-58'	1513	0.044	0.055	103.1	3.01	2.86
20	RS-D389-99 58'-61'	230	0.007		25.0	0.73	
21	RS-D389-99 61'-65'	256	0.007		37.3	1.09	
22	RS-D389-99 65'-70'	1071	0.031		111.6	3.26	
23	RS-D389-99 70'-71'	1101	0.032		11.8	0.35	
24	RS-D389-99 71'-75'	248	0.007		82.2	2.40	
25	RS-D389-99 75'-78.5'	1313	0.038		7.4	0.22	
26	RS-D389-99 78.5'-80.7	282	0.008		3.7	0.11	
27	RS-D389-99 80.7'-82.4	249	0.007		5.5	0.16	
28	RS-D389-99 82.4'-83.5	1166	0.034		5.3	0.15	
29	RS-D389-99 83.5'-85.4	2524	0.074	0.099	10.2	0.30	0.32
30	RS-D389-99 85.4'-90'	465	0.014		27.1	0.79	
31	STD 75341	5562	0.162	0.158	63.0	1.84	1.88

Monday, January 10, 2000

By

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES
840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Kurt Allen
Hecla (Rosebud Mine)
P.O. Box 2610
Winnecmucca, NV 89446 US

Client PO:

Invoice No:	33100358
Invoice Date:	1/12/00
JobNo:	99-51-77
Account No:	00007292

INVOICE

Terms: Net 30 days

Item Description	Qty	Unit Price	Amount
Core 16-20 Lbs	30	$4.50	$135.00
Au, Ag FA/AA	31	$6.50	$201.50
Au, Ag FA	7	$7.00	$49.00

PLEASE REMIT TO:

Inspectorate America Corp.
P.O. Box 201901
Houston, TX 77216-1901

Sub Total:	**$385.50**
Discount: (0.00%)	**$0.00**
Discounted Total:	**$385.50**
Add'l Discount: (0.00%)	**$0.00**
Final Total:	**$385.50**

PAID

CLIENT: Hecla (Rosebud Mine)

ROCKY MOUNTAIN GEO 7753592944 01/12 '00 14:53 NO.090 02/02

99-51-77	Sample Designation	Gold Fire/AA ppb	Gold Fire/AA oz/ton	Gold Fire Assay oz/ton	Silver Fire/AA ppm	Silver Fire/AA oz/ton	Silver Fire Assay oz/ton
1	RS-D389-99 0'-5'	821	0.024		32.2	0.94	
2	RS-D389-99 5'-7.8'	1285	0.038		31.5	0.92	
3	RS-D389-99 7.8'-8.8'	177	0.005		6.9	0.20	
4	RS-D389-99 8.8'-10'	167	0.005		9.0	0.26	
5	RS-D389-99 10'-13.8'	148	0.004		5.4	0.16	
6	RS-D389-99 13.8'-17.5	614	0.018		5.8	0.17	
7	RS-D389-99 17.5'-20.9	1658	0.048	0.035	61.6	1.80	1.69
8	RS-D389-99 20.9'-23.4	855	0.025		23.3	0.68	
9	RS-D389-99 23.4'-26.3	1675	0.049	0.078	13.2	0.39	0.57
10	RS-D389-99 26.3'-30'	3052	0.089	0.039	97.3	2.84	2.96
11	RS-D389-99 30'-35'	647	0.019		7.5	0.22	
12	RS-D389-99 35'-37.7'	1249	0.036		19.9	0.58	
13	RS-D389-99 37.7'-39.6	488	0.014		8.7	0.26	
14	RS-D389-99 39.6'-43.8	2021	0.059	0.051	138.0	4.03	10.26
15	RS-D389-99 43.8'-48'	449	0.013		58.6	1.71	
16	RS-D389-99 48'-50'	649	0.019		40.4	1.18	
17	RS-D389-99 50'-52'	614	0.018		177.4	5.18	
18	RS-D389-99 52'-55.1'	854	0.025		149.7	4.37	
19	RS-D389-99 55.1'-58'	1513	0.044	0.055	103.1	3.01	2.86
20	RS-D389-99 58'-61'	230	0.007		25.0	0.73	
21	RS-D389-99 61'-65'	256	0.007		37.3	1.09	
22	RS-D389-99 65'-70'	1071	0.031		111.6	3.26	
23	RS-D389-99 70'-71'	1101	0.032		11.8	0.35	
24	RS-D389-99 71'-75'	248	0.007		82.2	2.40	
25	RS-D389-99 75'-78.5'	1313	0.038		7.4	0.22	
26	RS-D389-99 78.5'-80.7	282	0.008		3.7	0.11	
27	RS-D389-99 80.7'-82.4	249	0.007		5.5	0.16	
28	RS-D389-99 82.4'-83.5	1166	0.034		5.3	0.15	
29	RS-D389-99 83.5'-85.4	2524	0.074	0.099	10.2	0.30	0.32
30	RS-D389-99 85.4'-90'	465	0.014		27.1	0.79	
31	STD 75341	5562	0.162	0.158	63.0	1.84	1.88

Reported NSI

Monday, January 10, 2000

By _____

99-51-77

					Au	Au	Au		Ag	Ag
					FA/AA	FA/AA	FA/Grav		FA/AA	FA/Grav
	Type	Hole #	From	To	ppb	opt	opt		opt	opt
1	RS-	D389	0	5	821	0.024			0.940	
2	RS-	D389	5	7.8	1285	0.038			0.920	
3	RS-	D389	7.8	8.8	177	0.005			0.202	
4	RS-	D389	8.8	10	167	0.005			0.264	
5	RS-	D389	10	13.8	148	0.004			0.158	
6	RS-	D389	13.8	17.5	614	0.018			0.170	
7	RS-	D389	17.5	20.9	1658	0.048	0.035		1.800	1.69
8	RS-	D389	20.9	23.4	855	0.025			0.680	
9	RS-	D389	23.4	26.3	1675	0.049	0.078		0.386	0.57
10	RS-	D389	26.3	30	3052	0.089	0.039		2.840	2.96
11	RS-	D389	30	35	647	0.019			0.219	
12	RS-	D389	35	37.7	1249	0.036			0.580	
13	RS-	D389	37.7	39.6	488	0.014			0.255	
14	RS-	D389	39.6	43.8	2021	0.059	0.051		4.030	10.26
15	RS-	D389	43.8	48	449	0.013			1.710	
16	RS-	D389	48	50	649	0.019			1.180	
17	RS-	D389	50	52	614	0.018			5.180	
18	RS-	D389	52	55.1	854	0.025			4.370	
19	RS-	D389	55.1	58	1513	0.044	0.055		3.010	2.86
20	RS-	D389	58	61	230	0.007			0.730	
21	RS-	D389	61	65	256	0.007			1.090	
22	RS-	D389	65	70	1071	0.031			3.260	
23	RS-	D389	70	71	1101	0.032			0.346	
24	RS-	D389	71	75	248	0.007			2.400	
25	RS-	D389	75	78.5	1313	0.038			0.217	
26	RS-	D389	78.5	80.7	282	0.008			0.108	
27	RS-	D389	80.7	82.4	249	0.007			0.160	
28	RS-	D389	82.4	83.5	1166	0.034			0.154	
29	RS-	D389	83.5	85.4	2524	0.074	0.099		0.298	0.324
30	RS-	D389	85.4	90	465	0.014			0.790	
31			STD-	75341	5562	0.162	0.158		1.840	1.876

DARK ZONE DEVELOPMENT DRILLING
DOWN-HOLE SURVEYS

DRILL HOLE #	DIP	AZIMUTH	CORRECTED AZIMUTH
RS-D370-99	5.5	313	328.66
RS-D371-99	22	313	328.66
RS-D372-99	36	313	328.66
RS-D373-99		Not	Surveyed
RS-D374-99		Not	Surveyed
RS-D375-99	14.5	142	157.66
RS-D376-99	31	135	150.66
RS-D377-99	51	177.5	161.84
RS-D378-99	-4	317	332.66
RS-D379-99	22	314	329.66
RS-D380-99	39		331
RS-D381-99	26	314.5	330.16
RS-D382-99	39.5	311.5	327.16
RS-D383-99	58	305	320.66
RS-D384-99	31	314.5	330.16
RS-D385-99	50.5	309	324.66
RS-D386-99	69	305	320.66
RS-D387-99	86	304.68	320.34
RS-D388-99	10.5	137.5	153.16
RS-D389-99	30.5	140	155.66

Point	Northing	Easting	Elevation	Description
1	2,204,482.2684	481,967.9582	4,345.06	N21BS
146	2,204,446.8501	482,396.7055	4,354.82	384
147	2,204,441.6573	482,399.6361	4,357.37	385
148	2,204,439.4456	482,400.6166	4,357.43	386
149	2,204,436.5937	482,401.4911	4,358.59	387
150	2,204,429.0662	482,407.0972	4,350.49	388
151	2,204,429.4145	482,406.5015	4,353.59	389
152	2,204,430.5218	482,435.1747	4,358.73	381
153	2,204,429.3186	482,435.5506	4,363.49	382
154	2,204,425.1618	482,437.6035	4,364.08	383
155	2,204,412.8824	482,472.0992	4,358.36	370
156	2,204,412.7553	482,471.8012	4,361.96	371
157	2,204,412.2666	482,472.2979	4,364.63	372
158	2,204,407.7960	482,474.9600	4,367.92	373
159	2,204,404.8226	482,476.6447	4,368.40	374
160	2,204,392.1322	482,483.4680	4,361.01	375
161	2,204,392.4909	482,483.4562	4,363.90	376
162	2,204,392.6683	482,482.9364	4,369.46	377
163	2,204,397.3947	482,510.3608	4,360.68	378
164	2,204,397.4057	482,510.0441	4,366.13	379
165	2,204,396.9083	482,510.0179	4,371.04	380

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES
840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Work Order # _____
Date Received _____
Purchase Order # _____
Project # _____
Date Shipped 12/21/99
Shipped Via _____
# of Cartons _____
# of Samples 30

Geochemical Laboratory Instruction Sheet

Copy of Results:	Results And Invoice To:
Kurt Allen	Kurt Allen
Rosebud Mining L.L.C.	Rosebud Mining L.L.C.
P.O. Box 2610	P.O. Box 2610
Winnemucca NV 89446	Winnemucca NV 89446
(775) 623-6912 Fax (775) 623-6967	AUTHORITY:

No. of Samples	Sample Type	List of Sample Numbers	Elements Requested
30	core	RS-D389 -99	Au Ag : USE Rosebud
			Mine development
		See attached sheet for	Protocal
		sample intervals	
1	Pulp	Rosebud Production standard	
		at end of run	

COARSE REJECT (Free storage for 30 days)
- ☒ Return/collect after analysis
- ☐ Return/collect after 30 days
- ☐ Discard after 30 days

IF NOT MARKED, REJECT DISCARDED AFTER 30 DAYS

PULP (Free storage for 6 months)
- ☒ Return/collect after analysis
- ☐ Return/collect at 6 months
- ☐ Discard at 6 months

IF NOT MARKED, PULP IS DISCARDED AFTER 6 MONTHS

COARSE REJECTS/PULPS WILL BE DISCARDED UNLESS OTHERWISE REQUESTED

Au - GOLD METHOD
- ☒ Fire Assay/A.A.
- ☐ Fire Assay/Gravimetric
- ☐ NaCN/A.A.

RESULTS REPORTED IN:
- ☐ ppb ☐ PPM
- ☒ oz/T ☐ grams/T

TRACE ELEMENT METHOD
- ☐ Wet Chem./A.A.
- ☐ Wet Chem./ICP

RESULTS REPORTED IN:
- ☐ ppm ☐ Percent %
- ☒ oz/T ☐ grams/T

ADDITIONAL INSTRUCTIONS: _____

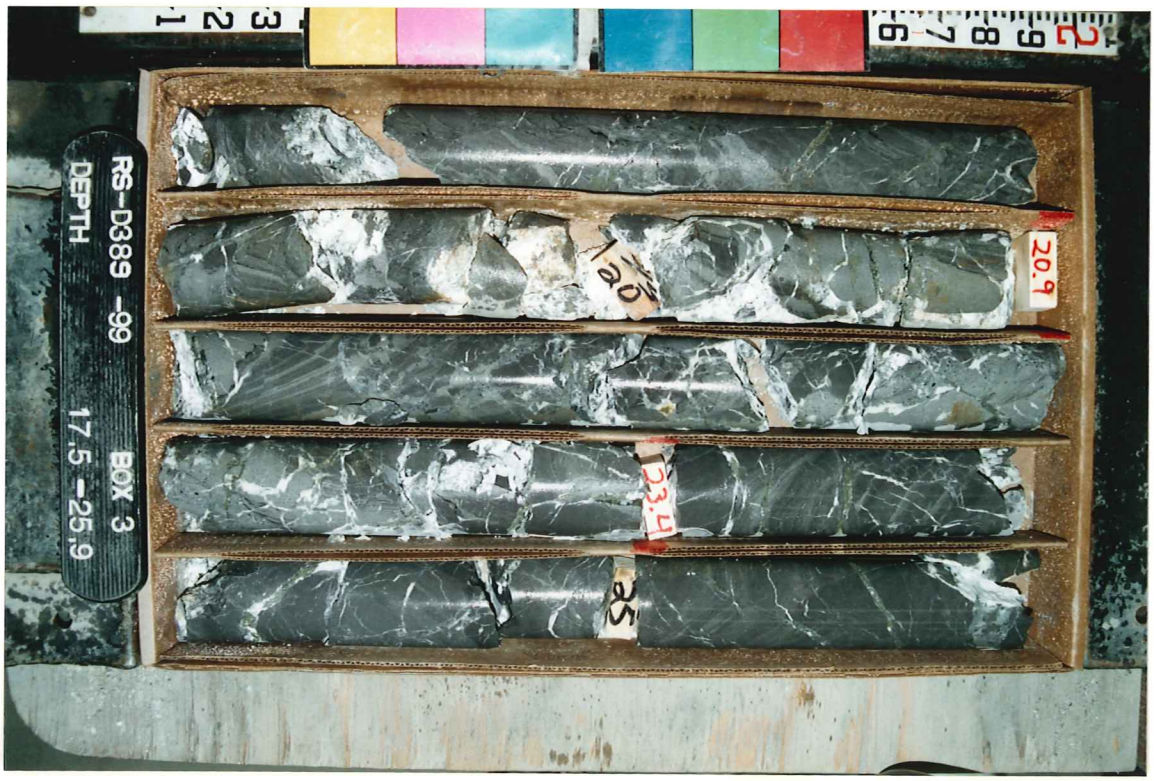
NOV96:PM5:RENO3:GEOCHEM

RS-D389-99

Depth From	To	Interval	Au	Ag	Sample Number
0	5	5	x	x	1
5	7.8	2.8	x	x	2
7.8	8.8	1	x	x	3
8.8	10	1.2	x	x	4
10	13.8	3.8	x	x	5
13.8	17.5	3.7	x	x	6
17.5	20.9	3.4	x	x	7
20.9	23.4	2.5	x	x	8
23.4	26.3	2.9	x	x	9
26.3	30	3.7	x	x	10
30	35	5	x	x	11
35	37.7	2.7	x	x	12
37.7	39.6	1.9	x	x	13
39.6	43.8	4.2	x	x	14
43.8	48	4.2	x	x	15
48	50	2	x	x	16
50	52	2	x	x	17
52	55.1	3.1	x	x	18
55.1	58	2.9	x	x	19
58	61	3	x	x	20
61	65	4	x	x	21
65	70	5	x	x	22
70	71	1	x	x	23
71	75	4	x	x	24
75	78.5	3.5	x	x	25
78.5	80.7	2.2	x	x	26
80.7	82.4	1.7	x	x	27
82.4	83.5	1.1	x	x	28
83.5	85.4	1.9	x	x	29
85.4	90	4.6	x	x	30

13.8
17.5
15
10
RS-D389 -99
BOX 2
DEPTH
8.8 - 17.5

8.8
7.8
RS-D389 -99
BOX 1
DEPTH
0 - 8.8


20.9
RS-D389 -99
BOX 3
DEPTH
17.5 -25.9

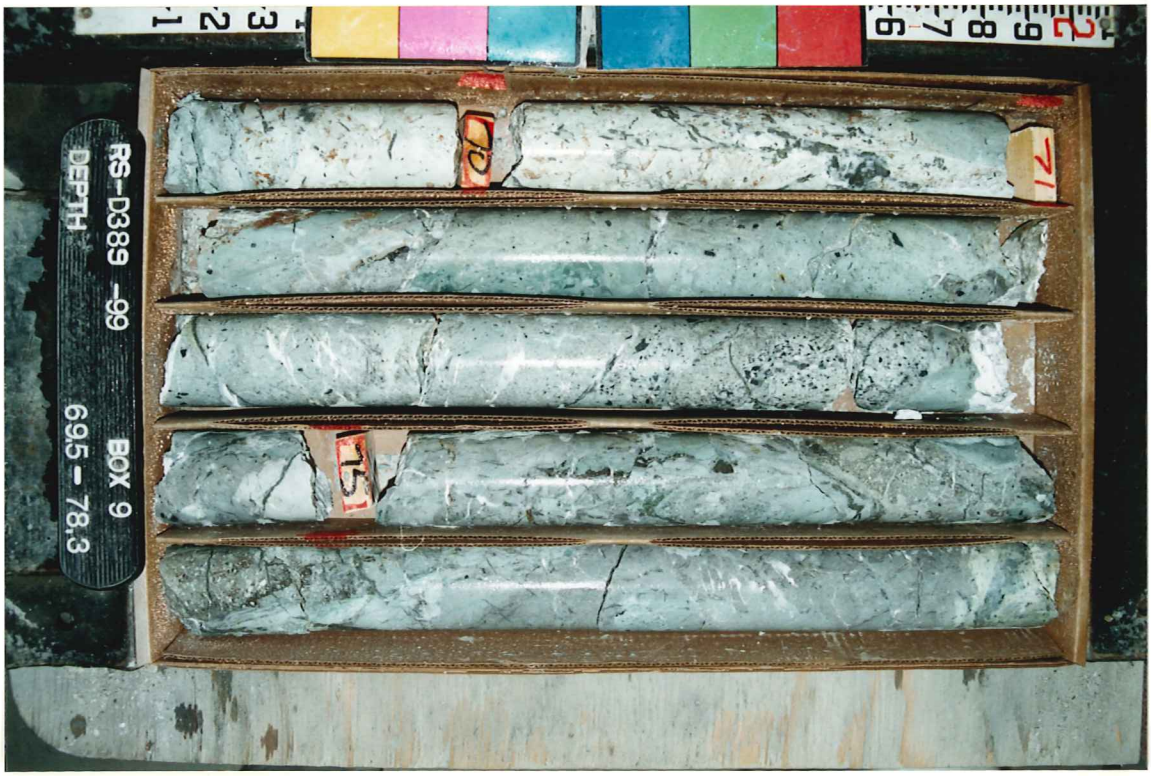
RS-D389 -99 BOX 5
DEPTH 34.5 - 43.3
35
37.7
39.6

RS-D389 -99 BOX 4
DEPTH 25.9 - 34.5
26.3
30

RS-D389 -99 BOX 6
DEPTH 43.3 - 52

RS-D389 -99
BOX 8
DEPTH
60.5 - 69.5

RS-D389 -99
BOX 7
DEPTH
52 - 60.5


RS-D389 -99
BOX 9
DEPTH
69.5 - 78.3

TD
90
RS-D389 -99 BOX 11
DEPTH 87.4 - 90

SD
85.4
85
82.4
80.7
78.5
83.5
RS-D389 -99 BOX 10
DEPTH 78.3 - 87.4

WELL RS-D389

DEPTH 90'

PICTURE NO.

INCLINATION +30

OBS. DIR.

COR. DIR.

TOOL FACE

RUN BY G-GARDIE

DATE 12-17-99

CHECKED BY

sperry-sun
DRILLING SERVICES