60001610

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 RL-226
AUTHOR	G Langstaff; M. Wagers; R. Donata; T. Kuhl; K. Kenner; S. Adam
DATE OF DOC(S)	1991, 1999
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Stevens Drilling; Lac Minerals (USA) Inc; Rosebud Peak; Newmont Gold Co; North Rosebud Peak Bondar-Clegg, Inc; Chemex Lab, Inc
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 245' handwritten notes ~~9~~ p. 11

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 6/2/08
Initials Date

DB: mah
Initials Date

SCANNED: NV Blue
Initials Date

Revised: 1/22/08

Drill Log RL-226
Rosebud Rosebud Peak

66001610 4010

60001610

LAC MINERALS (U.S.A.) INC.

DRILL LOG SUMMARY SHEET

PROJECT Rosebud

HOLE NUMBER RL-226 TOTAL DEPTH 245 LOGGED BY MCW

Date started 8-22-91

Date completed 8-23-91

Initial bearing Vertical

Initial inclination

Elevation

Collar coordinates:

N

E

Contractor: Stevens

Drill Type: Track RCD

Hole Size: 5 1/4"

Drilling Conditions:

Footage: Wet / Dry 245/145

Comments:

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)

Newmont Gold Rotary Form

Hole# RL-226 **Area** North Rosebud Peak **Az/Incl** _____ **Page** 1 of 1

Logged by G. Langstaff **Total Depth** 245'

Date 2/13/99 **Coords** _____ **Contractor** _____

Footage	Litho: Formation	Litho: Rock type	Litho: Color	Au oz/st	Ag oz/st	Graphic	Structure: fault	Structure: breccia	Structure: vein	Structure: gouge	Comments	Alteration: Silic	Alteration: argillic	Alteration: clay	Alteration: prop	Alteration: Sericite	Alteration: Chlorite	Alteration: green clay	Met.: FEOX	Met.: CO3	Mineralogy: Sulfide	Mineralogy: Pyrite	Mineralogy: Marcasite	Mineralogy: Calc/Dolo	Mineralogy: Clay
		F/S?	red & v. pale bin								unidentifiable volcanic or brecciated conglomerate	tr	1	0	0	0	0	0	2 lim			0	0	0	
											no sample														
20		Bmn? cs	v. pale brown								some clastic chips vitreous feldspar phenos 1mm clast-supported breccia or conglomerate subangular-subrounded clasts	tr	1					0	1 limon. tr			0	0	0	
40			v. pale grey (orm. crust)								qtz veins							tr							
		Fp-b, f? or Ssp? (see 225)	v. pale grey								white 1mm feldspar (?) phenos	0	2					0	0						
60			red to v. pale bin								dark greenish, vitreous rock with fresh subhedral-anhedral biotite up to 2mm long and v. rare vitreous feldspar phenos ~1mm; could be nearly fresh vitrophyre or strongly silicified rock pale color along locally dense network of fractures	?tr	tr												
80			v. pale yel & pink								fresh biotite even in clayey rock	tr	2											2 1 0	
			dark green								mmb? with relict microlites embedded in green rock blocky and elongate white clay-altered phenos 1-2mm	2	0					2				0			
100											samples lost in fire														
200		Ssp or bFa?									volcanic with alteration producing granular texture or sandstone with negligible hydrothermal alteration several chips with distinct clasts 1.5 to 1.5mm	1	0	0	0	0	0	0	tr		0	0	0	
220		bFa or Ssp?	reddish grey								homogeneous gray aphyric chips up to 7mm-pebbles? other chips look like sandstone		0												
240											rare clastic chips rare clastic chips														
											T.D. 245'														
260																									

diagenetic si-cement?

hard, red-brown veinlets

green clay

LAC MINERALS (U.S.A.) INC.
ROSEBUD PROJECT

CHOCOLATE TUFF
BUD BRECCIA
BUD TUFF
BUD EPICLASTIC
BUD TUFF BRECCIA
DT DOZER WELDED TUFF

ARGILLIC
XX SILICIFICATION
OX OXIDIZED
DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
P P P PROPYLITIZATION
Ca CALCITE

DRILL HOLE RL-226

Page 1 of 3

LOGGED BY MCW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
	Qal													Qal	<	<	
05														Broken up Alluvium Very Poor Recovery Small Sample	<.002	<<	
10														No Sample	<	<	
15														Very Small Sample			
20																	
25	CT	~							Orange Yellow LTGy					CT Bleached + Oxidized / Surface Rock Poss Sub Bedrock			
30		~															
35		~							LTGy Yellow								
40	Bud	~~							LTGrBrn LTOlive					LTGrn Clay Alt / Micro Bxt			
45		~~ ~							LTOlive					Strongly Clay Altered			
50		~~ ~ x x x							LTOlive For. Grn					Combination Stag Arg Alt w/ Sta Sil Alt			
55		x x x							M-DkGrn W/ BrnGrn					Stag Sil Alt			
60		x x x ~ ~							ForGrn LTOlive					Stag Arg Alt	<<	<<	
65		x x x x												Clr Qtz	<	<	
70		x x x ~ ~												Stag Arg Alt			
75		~ ~ x x x							MedGrn LTOlive					Clr to Wh Qtz			
80		x x x ~ ~							Med Grn Red Brn LT Olive								
85		x x x							DkGrn To LTOlive								
90		x x x x															
95		x x x x							DkGrn								
100																	

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CHOCOLATE TUFF
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Page 2 of 3

LOGGED BY MCW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
									Dk Grn to LT Olive					Stng Arg Alt; Stng Sil Alt	<	<	
105														Wlt Qtz			
10														Tuff Porph; Dk Grn Mtx Arg LT Grn Phenos			
15															<L	<L	
20									LT Olive M-Dk Grn Orng Tan						<	<	
25									M Grn to LT Olive					Stng Arg alt			
30									LT Olive to Red Brn					Stng Sil Alt			
35									L-M Olive TR Red Brn								
40														Clay Balls			
45														Go Wet			
50									M-Dk Grn W/Red Brn								
55																	
60																	
65																	
70									LT Olive Orange					Stng Arg Alt; ?Increasing Sil Alt	<L	<L	
75									LT Olive For Grn Orng						<	<	
80														?Increasing Sil Alt			
85									LT-M Olive Orange					Stng Sil Alt			
90									Mern Orng Red Brn LT Tan					Fine Grained Tuff Porph; Wild Rose?			
95									Orng Brn Grn								
200																	

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CHOCOLATE TUFF
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DT DOZER WELDED TUFF

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DRILL HOLE RL-226

Page 3 of 3

LOGGED BY MCW

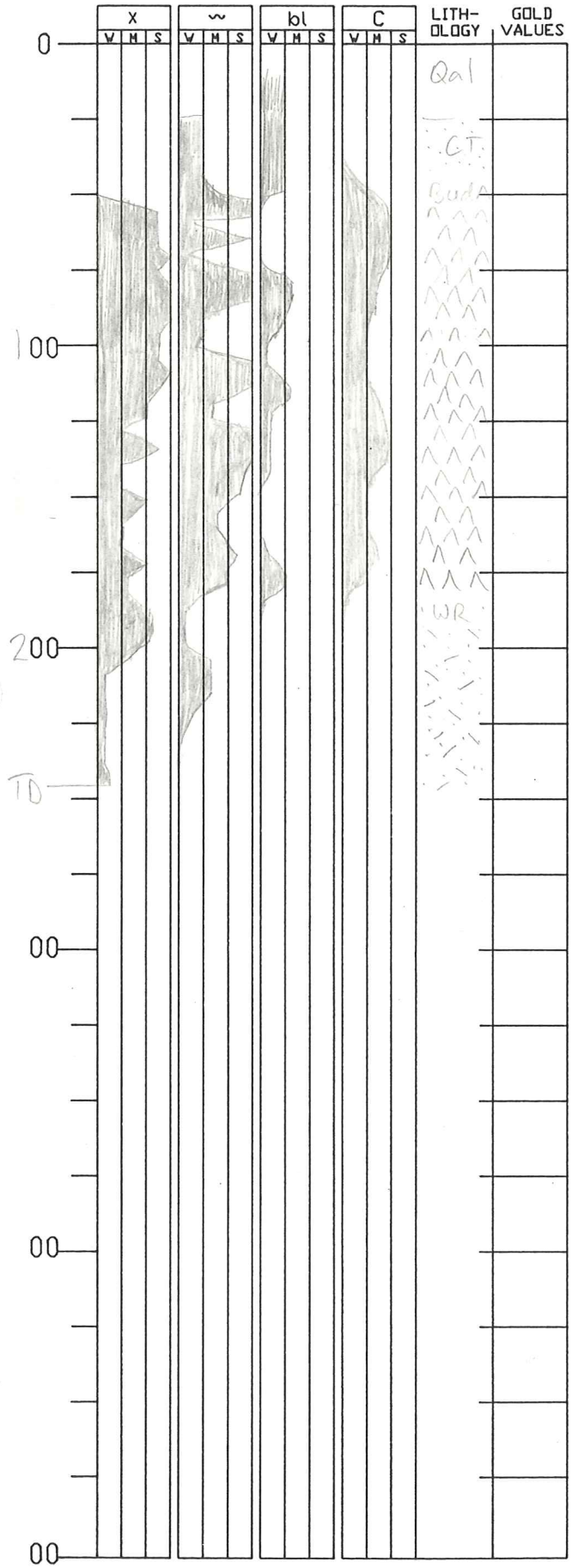
	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	
		N							Brn DKGY Wh Orng					Wild Rose WH CLY ? ALT Phenos TR Micro Bx + Fine Grained Tuff Porph.	<	<		
205		N							Brn Orng WH									
10		N																
15		N													<1/2	<1/2		
20		N													<	<		
25		N							DKGY Red Brn Brn						<	<		
30		N X													<1/2	<1/2		
35		X													<	<		
40		X													<	<		
245														TD 11:25 8-23-91				
50																		
55																		
60																		
65																		
70																		
75																		
80																		
85																		
90																		
95																		
200																		

GRAPHIC LOG SUMMERY

DATE 8-22 to 23-91

PROJECT ROSEBUD HOLE NO. RL-226 T.D. 245 PAGE 1 OF 1

ALTERATION



DESCRIPTION

X-silicification ~-argillic bl-bleaching C-celadonite

COLOR	
	Qal Poor to No Recovery
Orng Yel LtGrY LtGrY Yell LtGrn Olive LtOlive	CT Stngly Clay Alt LtGrn Clay Alt Poss. Sub Bedrock Micro Qtz
Lt Olive ForGrn m-DkGrn BrnGrn ForGrn Olive	Stng Arg Alt Stng Arg Alt Stng Sil Alt Clr Qtz
MGrn Olive DkGrn LtOlive DkGrn	Clr to WH Qtz
DkGrn LtOlive	Stng Arg Alt WH Qtz Tuff Porph DkGrn Mkr Arg LtGrn Phenos
MGrn LtOlive LtOlive RdBrn	Stng Arg Alt Stng Sil Alt Go Wet Clay Balls
m-DkGrn RedBrn LtOlive Orng	Stng Arg Alt
MGrn Orng RdBrn LtTan Orng Brn Crm	Fine Grained Tuff Porph Increasing Silica Alt Stng Qtz Alt Wild Rose ?
Brn DkGY WH Brn Orng WH	WH Cly Alt Phenos TR Micro Bxt
DkGY RdBrn	
	TD 245 11:25AM 8-23-91

RL226

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R91-11851.4 (COMPLETE)

REFERENCE INFO: RL 226 H-245

CLIENT: IAC MINERALS (USA) INC.
PROJECT: ROSEBUD

SUBMITTED BY: WAGER
DATE PRINTED: 11-SEP-91

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au DUP	Gold Duplicate	6	0.002 OPT		Fire Assay
2	Au	Gold	50	0.002 OPT		Fire Assay
3	AG DUP	AG DUPLICATE	6	0.02 OPT		Fire Assay
4	Ag	Silver	50	0.02 OPT		Fire Assay

SAMPLE TYPES		NUMBER	SIZE FRACTIONS		NUMBER	SAMPLE PREPARATIONS	NUMBER
Z	OTHER DRILL TYPES	48	2	-150	48	CRUSH,PULVERIZE -150	48
P	PREPARED PULP	2	4	AS REC'D	2	AS RECEIVED, NO SP	2
						EXCESS WEINESS/SAMP	5
						OVERWEIGHT/LBS	18

REPORT COPIES TO: MR. TIM KUHL
MR. TIM KUHL
MS. KRISTIN KENNER

INVOICE TO: MR. TIM KUHL

Richey L Dunton

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

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PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	Ag OPT	STANDARD NAME	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	Ag OPT
ANALYTICAL BLANK		-	<0.002	-	<0.02						
ANALYTICAL BLANK		-	<0.002	-	<0.02						
Number of Analyses		-	2	-	2						
Mean Value		-	0.0010	-	0.010						
Standard Deviation		-	0.000000	-	0.0000						
Accepted Value		-	0.002	-	0.02						
ASSAY STD		-	0.014	-	0.20						
Number of Analyses		-	1	-	1						
Mean Value		-	0.0140	-	0.200						
Standard Deviation		-	-	-	-						
Accepted Value		-	0.012	-	0.24						

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SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	Ag OPT	SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	Ag OPT
Z2 RL226 0 5			<0.002		<0.02	Z2 RL226 200 205			<0.002		<0.02
Z2 RL226 5 10		<0.002	0.002	<0.02	<0.02	P4 BA 170			<0.002		<0.02
Z2 RL226 15 20			<0.002		<0.02	Z2 RL226 205 210			<0.002		<0.02
Z2 RL226 20 25			<0.002		<0.02	Z2 RL226 210 215			<0.002		<0.02
Z2 RL226 25 30			<0.002		<0.02	Z2 RL226 215 220		<0.002	<0.002	<0.02	<0.02
Z2 RL226 30 35			<0.002		<0.02	Z2 RL226 220 225			<0.002		<0.02
Z2 RL226 35 40			<0.002		<0.02	Z2 RL226 225 230			<0.002		<0.02
Z2 RL226 40 45			<0.002		<0.02	Z2 RL226 230 235		<0.002	<0.002	<0.02	<0.02
Z2 RL226 45 50			<0.002		<0.02	Z2 RL226 235 240			<0.002		<0.02
Z2 RL226 50 55			<0.002		<0.02	Z2 RL226 240 245			<0.002		<0.02
Z2 RL226 55 60			<0.002		<0.02						
Z2 RL226 60 65		<0.002	<0.002	<0.02	<0.02						
Z2 RL226 65 70			<0.002		<0.02						
Z2 RL226 70 75			<0.002		<0.02						
Z2 RL226 75 80			<0.002		<0.02						
RL226 80 85			<0.002		<0.02						
RL226 85 90			<0.002		<0.02						
Z2 RL226 90 95			<0.002		<0.02						
Z2 RL226 95 100			<0.002		<0.02						
Z2 RL226 100 105			<0.002		<0.02						
P4 BA 169			<0.002		<0.02						
Z2 RL226 105 110			<0.002		<0.02						
Z2 RL226 110 115			<0.002		<0.02						
Z2 RL226 115 120		<0.002	<0.002	<0.02	<0.02						
Z2 RL226 120 125			<0.002		<0.02						
Z2 RL226 125 130			<0.002		<0.02						
Z2 RL226 130 135			<0.002		<0.02						
Z2 RL226 135 140			<0.002		<0.02						
Z2 RL226 140 145			<0.002		<0.02						
Z2 RL226 145 150			<0.002		<0.02						
Z2 RL226 150 155			<0.002		<0.02						
Z2 RL226 155 160			<0.002		<0.02						
Z2 RL226 160 165			<0.002		<0.02						
Z2 RL226 165 170		<0.002	<0.002	<0.02	<0.02						
Z2 RL226 170 175			<0.002		<0.02						
Z2 RL226 175 180			<0.002		<0.02						
RL226 180 185			<0.002		<0.02						
RL226 185 190			<0.002		<0.02						
Z2 RL226 190 195			<0.002		<0.02						
Z2 RL226 195 200			<0.002		<0.02						

Bondar-Clegg, Inc.
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Geochemical Lab Report

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REPORT: R91-11851.4 (COMPLETE)

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	Ag OPT	SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	Ag OPT
RL226 5 10		<0.002	0.002	<0.02	<0.02						
Duplicate			<0.002		<0.02						
RL226 60 65		<0.002	<0.002	<0.02	<0.02						
Duplicate			<0.002		<0.02						
RL226 115 120		<0.002	<0.002	<0.02	<0.02						
Duplicate			<0.002		<0.02						
RL226 130 135			<0.002		<0.02						
Prep Duplicate			0.002		0.02						
RL226 165 170		<0.002	<0.002	<0.02	<0.02						
Duplicate			<0.002		<0.02						
RL226 215 220		<0.002	<0.002	<0.02	<0.02						
Duplicate			<0.002		<0.02						
[illegible]26 230 235		<0.002	<0.002	<0.02	<0.02						
[illegible]ep Duplicate			<0.002		<0.02						

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
994 West Glendale Ave., Suite 7, Sparks,
Nevada, U.S.A. 89431
PHONE: 702-356-5395

To: LAC MINERALS U.S.A. INC

1395 GREG ST., STE 107
SPARKS, NEVADA
89431

Project : ROSEBUD
Comments: ATTN: TIM KUHL

Certificate Date: 12-SEP-91
Invoice No. : I9121257
P.O. Number :

CERTIFICATE OF ANALYSIS A9121257

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
RL215 195-200	205	294	0.002
RL215 245-250	205	294	0.003
RL215 295-300	205	294	0.007
RL215 345-350	205	294	0.087
RL215 395-400	205	294	0.006
RL215 445-450	205	294	0.001
RL215 495-500	205	294	0.010
RL215 545-550	205	294	0.001
RL215 595-600	205	294	0.003
RL215 645-650	205	294	0.002
RL215 695-700	205	294	< 0.001
RL215 745-750	205	294	0.002
RL215 795-800	205	294	0.001
RL222 945-950	205	294	0.005
RL222 995-1000	205	294	0.004
RL225 060-065	205	294	< 0.001
RL225 110-115	205	294	< 0.001
RL225 160-165	205	294	< 0.001
RL225 215-220	205	294	< 0.001
RL226 050-055	205	294	< 0.001
RL226 100-105	205	294	< 0.001
RL226 200-205	205	294	< 0.001
RL227 050-055	205	294	0.001
RL227 100-105	205	294	0.001
RL227 150-155	205	294	0.002
RL227 200-205	205	294	0.005
RL227 250-255	205	294	< 0.001
RL227 300-305	205	294	< 0.001
RL227 350-355	205	294	< 0.001
RL227 400-405	205	294	0.004
RL227 450-455	205	294	0.001
RL227 500-505	205	294	0.004
RL228 045-050	205	294	< 0.001
RL228 095-100	205	294	0.001
RL228 145-150	205	294	< 0.001
RL228 200-205	205	294	0.003
RL228 245-250	205	294	0.007
RL228 295-300	205	294	0.003
RL228 345-350	205	294	< 0.001
RL228 395-400	205	294	< 0.001

CERTIFICATION: Sandra M. Adams