60001659

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-281
AUTHOR	K. Kenner; R. Bennett; V. Peterson; T. Kuhl
DATE OF DOC(S)	1992
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Far East; Lac Minerals (USA) Inc; Bondar-Clegg, Inc; Barringer Laboratories, Inc
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; ~~total depth~~ handwritten notes ~~12~~ p. 14

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 6/3/08
Initials Date
DB: mch
Initials Date
SCANNED: NV Blue
Initials Date

Revised: 1/22/08

ROSEBUD
DRILL LOG

RL-281
FAR EAST

60001659 4010

G0001659

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

CHALCEDONY

FINE-GRAINED TUFF
BEDDED BUD LLT
VOLCANICLASTIC
PORPHYRITIC TUFF
FLOW BANDED TUFF

TD: @ 470'

on site 3:00 PM

VEIN TYPES

DRUZY QUARTZ
Xc CHALCEDONIC
Xk STOCKWORK
Ca CALCITE
HYDROTHERMAL BRECCIA VNS
Ba BARITE

Friday 13th
11/13/92

Move to site
Coates MPD-1000
Dale Eklund driller

DRILL HOLE RL-281

Page 1 of 5

-45°, N45°W

LOGGED BY KJK / REB

FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W	BLEACH M	BLEACH S	CLAY W	CLAY M	CLAY S	SILIC W	SILIC M	SILIC S	COLOR	% FeOx W	% FeOx M	% FeOx S	% SULF.	COMMENTS	RQD CONN.	Ag	Au	✓
3:05			Xc										golden mustard green				NIL	Near Base Upper → Bud in ote. at collar		<.02	.003	
05			Xk															0-57 BEDDED BUD 0-25 oxidized; strongly		<	.002	
10			Xc															argillized bud w/ weak intermittent chalcedony		<	<	
15																		; qtz stockwork		<	<	
20																		25-43 Red brown - relatively unaltered Bud w/ weak fine Ox		<	<	
25																				<	<	
3:33			Xk										burg. brn					hairline qtz Red stockwork		<	<	
30																				<	<	
35																		43-57 classic green bud w/ celadonite/ glauconite rich matrix		<	<	
40													celadon green				TR diss py	; tr. diss. py		<	<	
45			Xc																	<	<	
50																				<	<	
55																				<	<	
3:48			Xk Xc										peachish tan				1-2% diss py	57-209 Flowbanded to FGT most likely Tmb		.003	<.001	
60																		pervasively bleached;		.009	<	
65																		wk argillic alteration locally finely clastic, perv.		.009	<	
70																		intermittent xtals - clay alt/ qtz. vein w/a little water, in intermittent - perv. stockwork qtz		.073 / .0025		
75																		+ chalcedony veins - Small sample w/ wet cuttings		.044	.0017	
80																		- Better sample - 70-85 Prominent		.038	<	
85																		amber to rootbeer brown chalcedony veins - locally banded		.015	<	
90																		questionable fracture zone 70-75 weak golden oxidation		.003	<	
95																				.003	<	
100																						

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

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

DRILL HOLE RL-281

Page 2 of 5

VEIN TYPES

- FINE-GRAINED TUFF
- BEDDED BUD LLT
- VOLCANICLASTIC
- PORPHYRITIC TUFF
- FLOW BANDED TUFF

- DRUZY QUARTZ
- Xc CHALCEDONIC
- Xk STOCKWORK
- Ca CALCITE
- HYDROTHERMAL BRECCIA VNS
- Ba BARITE

LOGGED BY KLK REB

11-14-92 the team decided to show up at 8:45 AM instead of 6:30 AM as planned (claimed pickup problem)

FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W	BLEACH M	BLEACH S	CLAY W	CLAY M	CLAY S	SILIC W	SILIC M	SILIC S	COLOR	% FeOx W	% FeOx M	% FeOx S	% SULF.	COMMENTS	ROD CONN.	Ag	Au	✓
	Tmb		Xc Xk										lt gray/tan				1-2% diss py	57-209 (Tmb?) Fine grained to flow banded tuff - poss. locally		.006	<.001	
105													to peach					clastic, pervasively bleached w/ weak clay alt, pervasive		.012	<	
110																		fine qtz stockwork, local waxy green (duckbutter)		.006	<	
115																		Kaolinite clay filled fractures. Intermittent chalcedony veining. locally tectonically		.006	<	
120																		(hit water again) brecciated pervasive		.009	<	
125																		silica flooding - weak 100-125 weak to mod duck butter veins ▷ Kaolinite veins		.009	<	
130																		4:30 PM		.006	<	
4:30 PM																		Shut down going wet from 135'				
135																				.006	<	
9:15 AM 11-14-92 140																				.009	<	
145																		slight ↑ clay alteration		.009	<	
9:27 150																				.003	<	
155																				.003	<	
160																				.006	<	
165													medium gray				2-3% diss py	165-175 strongly silicified, intermittently brecciated - plus chalcedony veins		.003	<	
170																		+ poss As mineral (realgar?)		.006	<	
175													gray/tan					9:54 Sample hose blew -- knocked down for a loop. Fixed 10:25 1/2 hr. repair time		.02	<	
180																				.029	.0013	
185		FAULT															±1% diss py	185-195 FAULT - most likely, w/ poss. xtaline jarosite silicified, brecciated, oxidized, green hard waxy		.018	<	
190																		clay veins fractures, druzy qtz lining		.012	<	
195																		Lots of water coming in now.				
200																		195-209 footwall to fault above w/ ↑ argillic clay alt. tr. oxidation		.023	.0011	

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

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

DRILL HOLE R-281

Page 3 of 5

LOGGED BY KLK / REB

VEIN TYPES

- FINE-GRAINED TUFF
- BEDDED BUD LLT
- VOLCANICLASTIC
- PORPHYRITIC TUFF
- FLOW BANDED TUFF
- DRUZY QUARTZ
- Xc — CHALCEDONIC
- Xk — STOCKWORK
- Ca — CALCITE
- HYDROTHERMAL BRECCIA VNS
- Ba — BARITE

FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W	BLEACH M	BLEACH S	CLAY W	CLAY M	CLAY S	SILIC W	SILIC M	SILIC S	COLOR	% FeOx W	% FeOx M	% FeOx S	% SULF.	COMMENTS	RQD CONN.	Ag	Au	✓
	Tmb		Xc Xk										grayish tan				±1% diss py	57-209 Tmb descrip. @ above		.02	.0011	
205																		Upper T.M.B.		.012	.0002	
210													sage green				trace to 4% diss py	Middle BUD				
			weak intermittent Xc															209-260 TRANSITIONAL true Bud - clay matrix		<.02	<.001	
215			local v. fine Xk															w/ glauconitic alteration within FGT - predominantly		<	<	
220													sage green +					fresh gray - w/ local hematitic fractures		<	<	
225													gray					locally has clay replaced phenos. Bud is A LLT -		<	<	
230																		H_2O laiden - bedded Very weak intermittent		<	<	
235																		chalcedony veining. Local hairline qtz		<	<	
240																		stockwork w/in the fine grained tuff		<	<	
245																		(FGT)		<	<	
250																				<	<	
255																				<	<	
260																				<	<	
			Local Ca										green & gray				NIL to tr py	260-310 Volcaniclastic - similar to the		<	<	
265																	locally limon replac.	pyroclastic type -		<	<	
270																		within chocolate -				
																		FGT w/in FGT		.06	<	
275																		clasts are green w/in gray matrix.		.11	<	
280																		Note * this is NOT true bud - it is A FGT Volcaniclastic -		.07	<	
285																		poss. AUTO brecciated during deposition.		.18	<	
290																		local calcite veining				
			Ca																	.05	<	
295																						
300																				.08	<	

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

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

DRILL HOLE RL-281

Page 4 of 5

LOGGED BY KLK

FINE-GRAINED TUFF
BEDDED BUD LLT
VOLCANICLASTIC
PORPHYRITIC TUFF
FLOW BANDED TUFF

VEIN TYPES

DRUZY QUARTZ
Xc CHALCEDONIC
XK STOCKWORK
Ca CALCITE
HYDROTHERMAL BRECCIA VNS
Ba BARITE

FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W M S	CLAY W M S	SILIC W M S	COLOR	% FeOx W M S	% SULF.	COMMENTS	ROD CONN.	Ag	Au	✓
			Ca				green & gray		tr to ≤ 1% diss	Middle BUD continued Still lots of water		.08	<.001	
12:07 305									py	260 - 310 descrip. on previous page		.07	<	
310			local Ca				sage green to			310 - 370 TRUE BEDDED BUD - green glauconitic		.04	<	
315							locally lilac gray			clay rich matrix w/ white clay alt. clasts		.06	<	
320										Lithic lapilli tuff weak local calcite		.10	<	
325										veining.				
330										325-340 w/ few gray fine grained tuff innerbeds		<.02	<	
335												<	<	
340										epidote? present		<	<	
345												<	<	
350												<	<	
1:02 355												<	<	
360												<	<	
365												<	<	
370												.03	<	
375		Poss unalt	MOD STR Ca				red brown +			370-395 Fine grained tuff - volcaniclastic		<	<	
380		RBrown Bud or					wk green			versus red brown "relatively" unaltered		<	<	
385		Volcaniclastic								Bud has rusty red "hematitic" matrix		<	<	
390										prominent calcite veining. May well		<	<	
395										just be a transitional phase w/ in Bud		<	<	
400		true bud								395-402 True green clay / glauconite rich bud - H_2O laiden		<	.003	

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

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

DRILL HOLE RL-281

Page 5 of 5

LOGGED BY KLK / REB

VEIN TYPES

- FINE-GRAINED TUFF
- BEDDED BUD LLT
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FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W	BLEACH M	BLEACH S	CLAY W	CLAY M	CLAY S	SILIC W	SILIC M	SILIC S	COLOR	% FeOx W	% FeOx M	% FeOx S	% SULF.	COMMENTS	RQD CONN.	Ag	Au	✓
													green				NIL	395-402 true Bedded BUD		<.02	.001	
			local										Red Brown				NIL	402-470 MIXTURE of				
1:49 PM 405			cavt Xc										+ green				to TR diss	Fine grained to flow		<	.002	
410																	py	banded to autobrecciated				
415																		Volcaniclastic. Predom-		<	.001	
																		inantly unaltered -				
													lt green + red brown					Red Brown w/ few-very		<	.001	
420																		sage green clay rich				
																		inner beds. I would		<	<	
425																		not call this classic				
																		bedded bed. it is a		<	<	
430																		transitional FGT. -				
													Red Brown - local green					flow related. Few		<	<	
435																		calcite & chalcedony				
																		veins		<	<	
440																				<	.001	
445																				<	<	
450																						
																		455-460 strong		<	.001	
455																		gray to red orange				
			stv Xc															mottled chalcedony		<	<	
460																		veins w/ questionable v.v. fine dissem sulf.				
																		massive		<	<	
465																		Prob. Still in Middle BUD near base				
3:35 PM 470	T.D.																	T.D. hammer essen. watered-out		<	<	
475																						
480																						
485																						
490																						
495																						
500																						

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (702) 828-1158

25-Nov-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Page: 3
Copy: 2 of 2
Set : 2

Attn: Tim Kuhl
Project:

Received: 18-Nov-92 11:16

PO #:

Job: 923191R

Status: Final

Abbreviations:

Parameters:

Au	: Gold
Ag	: Silver

Methods:

FA/AA/AAS	: Fire Assay/AA Finish
FA/AA	: Fire Assay with AA finish
AA	: Atomic Absorption

Units:

oz/ton	: ounces per ton

Quality codes:

<	: less than
NA	: Not Analyzed

Job approved by:

Signed: .....

Vernon K. Peterson
Laboratory Manager

BONDAR-CLEGG

Geochemical Lab Report

File

Inchcape Testing Services

REPORT: R92-12002.4 (COMPLETE)

REFERENCE: RL-281 0-55,210-470

CLIENT: LAC MINERALS (USA) INC.

PROJECT: ROSEBUD

SUBMITTED BY: KUHL

DATE PRINTED: 4-DEC-92

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	63	0.001 OPT		FA PALLADIUM COLL.
2	AG	SILVER	63	0.02 OPT		FA PALLADIUM COLL.

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
Q OTHER DRILL TYPES	63	2 -150	63	CRUSH, PULVERIZE	63
				OVERWEIGHT / LB	226
				DRYING	63

REPORT COPIES TO: MR. TIM KUHL

INVOICE TO: MR. TIM KUHL

BONDAR-CLEGG

Geochemical Lab Report

Inchcape Testing Services

DATE PRINTED: 4-DEC-92

REPORT: R92-12002.4 (COMPLETE)

PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au OPT	AG OPT	STANDARD NAME	ELEMENT UNITS	Au OPT	AG OPT
ASSAY STD		0.012	0.30				
ASSAY STD		0.012	0.28				
ASSAY STD		0.016	0.26				
Number of Analyses		3	3				
Mean Value		0.0133	0.280				
Standard Deviation		0.00231	0.0200				
Accepted Value		-	0.24				

BARRINGER LABORATORIES INC.

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25-Nov-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Page: 1
Copy: 2 of 2
Set : 1

Attn: Tim Kuhl
Project:

Received: 18-Nov-92 11:16

PO #:

Job: 923191R

Status: Final

Cutting

Sample Id	Au FA/AA/AAS oz/ton	Au FA/AA oz/ton	Ag AA oz/ton
RL281 55 60	0.0002	NA	0.003
BL 175	0.0330	NA	NA
RL281 60 65	0.0001	NA	0.009
RL281 65 70	0.0001	NA	0.009
RL281 70 75	0.0025	0.0022	0.073
RL281 75 80	0.0017	NA	0.044
RL281 80 85	0.0003	NA	0.038
RL281 85 90	0.0003	NA	0.015
RL281 90 95	0.0004	NA	0.003
RL281 95 100	0.0002	NA	0.003
RL281 100 105	0.0002	NA	0.006
RL281 105 110	0.0006	NA	0.012
RL281 110 115	0.0006	NA	0.006
RL281 115 120	0.0001	NA	0.006
RL281 120 125	0.0004	NA	0.009
RL281 125 130	0.0002	NA	0.009
RL281 130 135	0.0003	NA	0.006
RL281 135 140	0.0003	NA	0.006
RL281 140 145	0.0001	0.0001	0.009
BL 176	<0.0001	NA	NA
RL281 145 150	0.0004	NA	0.009
RL281 150 155	0.0002	NA	0.003
RL281 155 160	0.0001	NA	0.003
RL281 160 165	0.0001	NA	0.006
RL281 165 170	0.0001	NA	0.003
RL281 170 175	0.0002	NA	0.006
RL281 175 180	0.0008	NA	0.020
RL281 180 185	0.0013	0.0019	0.029
RL281 185 190	0.0009	NA	0.018
RL281 190 195	0.0004	NA	0.012

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Attn: Tim Kuhl
Project:

Received: 18-Nov-92 11:16

PO #:

Job: 923191R

Status: Final

Cutting

Sample Id	Au FA/AA/AAS oz/ton	Au FA/AA oz/ton	Ag AA oz/ton
RL281 195 200	0.0011	NA	0.023
RL281 200 205	0.0011	NA	0.020
RL281 205 210	0.0002	NA	0.012

BONDAR-CLEGG

Geochemical Lab Report

Inchcape Testing Services

DATE PRINTED: 4-DEC-92

REPORT: R92-12002.4 (COMPLETE) PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	AG OPT	SAMPLE NUMBER	ELEMENT UNITS	Au OPT	AG OPT
Q2 RL-281 000-005		0.003	<0.02	Q2 RL-281 355-360		<0.001	<0.02
Q2 RL-281 005-010		0.002	<0.02	Q2 RL-281 360-365		<0.001	<0.02
Q2 RL-281 010-015		<0.001	<0.02	Q2 RL-281 365-370		<0.001	0.03
Q2 RL-281 015-020		<0.001	<0.02	Q2 RL-281 370-375		<0.001	<0.02
Q2 RL-281 020-025		<0.001	<0.02	Q2 RL-281 375-380		<0.001	<0.02
Q2 RL-281 025-030		<0.001	<0.02	Q2 RL-281 380-385		<0.001	<0.02
Q2 RL-281 030-035		<0.001	<0.02	Q2 RL-281 385-390		<0.001	<0.02
Q2 RL-281 035-040		<0.001	<0.02	Q2 RL-281 390-395		<0.001	<0.02
Q2 RL-281 040-045		<0.001	<0.02	Q2 RL-281 395-400		0.003	<0.02
Q2 RL-281 045-050		<0.001	<0.02	Q2 RL-281 400-405		0.001	<0.02
Q2 RL-281 050-055		<0.001	<0.02	Q2 RL-281 405-410		0.002	<0.02
Q2 RL-281 210-215		<0.001	<0.02	Q2 RL-281 410-415		0.001	<0.02
Q2 RL-281 215-220		<0.001	<0.02	Q2 RL-281 415-420		0.001	<0.02
Q2 RL-281 220-225		<0.001	<0.02	Q2 RL-281 420-425		<0.001	<0.02
Q2 RL-281 225-230		<0.001	<0.02	Q2 RL-281 425-430		<0.001	<0.02
Q2 RL-281 230-235		<0.001	<0.02	Q2 RL-281 430-435		<0.001	<0.02
Q2 RL-281 235-240		<0.001	<0.02	Q2 RL-281 435-440		<0.001	<0.02
Q2 RL-281 240-245		<0.001	<0.02	Q2 RL-281 440-445		0.001	<0.02
Q2 RL-281 245-250		<0.001	<0.02	Q2 RL-281 445-450		<0.001	<0.02
Q2 RL-281 250-255		<0.001	<0.02	Q2 RL-281 450-455		0.001	<0.02
Q2 RL-281 255-260		<0.001	<0.02	Q2 RL-281 455-460		<0.001	<0.02
Q2 RL-281 260-265		<0.001	<0.02	Q2 RL-281 460-465		<0.001	<0.02
Q2 RL-281 265-270		<0.001	<0.02	Q2 RL-281 465-470		<0.001	<0.02
Q2 RL-281 270-275		<0.001	0.06				
Q2 RL-281 275-280		<0.001	0.11				
Q2 RL-281 280-285		<0.001	0.07				
Q2 RL-281 285-290		<0.001	0.18				
Q2 RL-281 290-295		<0.001	0.05				
Q2 RL-281 295-300		<0.001	0.08				
Q2 RL-281 300-305		<0.001	0.08				
Q2 RL-281 305-310		<0.001	0.07				
Q2 RL-281 310-315		<0.001	0.04				
Q2 RL-281 315-320		<0.001	0.06				
Q2 RL-281 320-325		<0.001	0.10				
Q2 RL-281 325-330		<0.001	<0.02				
Q2 RL-281 330-335		<0.001	<0.02				
Q2 RL-281 335-340		<0.001	<0.02				
Q2 RL-281 340-345		<0.001	<0.02				
Q2 RL-281 345-350		<0.001	<0.02				
Q2 RL-281 350-355		<0.001	<0.02				

BONDAR-CLEGG

Geochemical Lab Report

Inchcape Testing Services

DATE PRINTED: 4-DEC-92

REPORT: R92-12002.4 (COMPLETE)

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	AG OPT	SAMPLE NUMBER	ELEMENT UNITS	Au OPT	AG OPT
RL-281 025-030		<0.001	<0.02				
Duplicate		<0.001	<0.02				
RL-281 240-245		<0.001	<0.02				
Duplicate		<0.001	<0.02				
RL-281 295-300		<0.001	0.08				
Duplicate		<0.001	0.05				
RL-281 340-345		<0.001	<0.02				
Prep Duplicate		<0.001	<0.02				
RL-281 350-355		<0.001	<0.02				
Duplicate		<0.001	<0.02				
RL-281 405-410		0.002	<0.02				
Duplicate		<0.001	<0.02				
RL-281 435-440		<0.001	<0.02				
Prep Duplicate		0.001	<0.02				
RL-281 465-470		<0.001	<0.02				
Duplicate		<0.001	<0.02				