60001266

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. RE-30
AUTHOR	K. Venner; N. Brewer; R. Grondin
DATE OF DOC(S)	1989
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Lac Minerals (USA) Inc Environmental West Exploration
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 365' 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 5/19/08
Initials Date
DB: mah
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

DRILL LOGS RE-30
Rosebud

60001266 4010

60001266

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RL-30 TOTAL DEPTH 365' LOGGED BY KLK

Date started Aug. 11, 1989 0-365'

Date completed 8-11-89

Initial bearing S2W

Initial inclination -59°

Elevation 5252.1

Collar coordinates:

N 2203297.0

E 480994.4

Contractor: Environmental West Explor

Drill Type: Reverse Circulation Reich 650

Hole Size: Hammer 5½"

Drilling Conditions: good

Footage: Wet / Dry

drilled entirely dry

Comments: possible ore zone 170'-223'

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)
0	50		-59	S02W			
50	150		-61	"			
150	250		-63	"			
250	350		-65	"			
350	365		-65.5	"			

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-30 PAGE 1 OF 8

Depth	RECOVERY	LITHOLOGIC DESCRIPTION (Chonkolite Tuff to Bud 15)	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLLITIC (W M S)	COLOR FINES	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au ✓	Ag	As	Hg	Sb	Se
0	POOR	Fine grained tuff w/ strong calcedony silicification pervasively bleached local wk white bleq strong limon/hem veining, wk yellow clay wk drusy qtz + hairline stwk qtz vns wk green (smectite/nontron?) alt						ORG BUFF				tr FeOx replac py		.002		<.10				
5	"	brecciated w/ micro sia vns. same ↓ FeOx vns w/ perv. gray hue wk limonitic clay						BUFF				"		.001		.13				
10	"	same w/ ↓ FeOx + wk fragmental component						"				"		.002		.13				
15	"	fragmental – Bud breccia (pebbles) pervasively bleached wk perv green smectite? wk limon vns + clay wk drusy + FeOx vns wk calcedony vns; silicification wk hairline stockwork wk perv. silicif						"				"		.007		.15				
20	"	same						"				"		.010		<.10				
25	"	same w/ ↑ perv. bleaching wk red org clay, wk limon clay						"				"		.001		.15				
30	"	same as 25-30 w/ ↑ limonitic clay						ORG BUFF				"		.002		.10				
35	"	same w/ ↑ calcedony vns ↑ bleach						"				"		.001		<.10				
40	"	same						"				"		.002		<.10				
45	"	same ↑ limonitic + red org clay						"				"		.002		.15				
50																				

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PROJECT: ROSEBUD LOGGED BY: KLK HOLE NO. RE-30 PAGE 2 OF 8

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLLITIC (W M S)	COLOR FINES	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
50	GOOD	fragmental Bud pyroclastic perv bleached ± clay alt perv smectite alt wk limonitic clay vug fill ± veining wk drusy fe clay filled veins wk Gru haulite stockwk qtz w/ local calcedony vns		XK XC				ORG BUFF				tr Fe oxy replac py		.002		<.10				
55	"	same						"				"		.003		.19				
60	"	same w/ ↑ perv smectite						"				"		.004		.12				
65	"	same w/ ↑ perv smectite						"				"		.001		<.10				
70	"	same w/ ↑ perv smectite						"				"		.006		<.10				
75	"	same ↑ perv limonite + limonite clay						"				"	+ tr wk fresh py	.008		<.10				
80	"	same ↑ limon clay + veins						"				"	"	.003		.15				
85	"	same ↑ limonitic clay + vns						"				"	+ wk fresh diss py	.001		<.10				
90	"	same ↑ calcedony vns						"				~2% diss py		.002		<.10				
95	"	same ↑ argillic clay alt mottled lilac tan to white green						"				2% diss py		.002		.19				
100																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-30 PAGE 3 OF 8

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ARGILLIC (W M S)	SILICIFICATION (W M S)	PROPYLLITIC (W M S)	COLOR FINES	LIMONITE (W M S)	HEMATITE (W M S)	JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	Au	Au V	Ag	As	Hg	Sb	Se
100	GOOD	fragmental - Bud - pervasive perv bleached wk-mod perv limonite + vnlets wk drusy qtz + assoc limonite wk smectite alt wk clay alt local wk silicification						wk ORG BUFF				tr FeOx repla py		.002		<.10				
105		105' - wk fracturing, wk calcedony vns																		
	"	same w/ mod-perv. limonite						"				tr fresh + tr FeOx replace py		.005		.15				
110	"	same w/ very mod perv. limonite						"				"		.028		<.10				
115	"	same w/ limon clay + perv "						"				"		.007		<.10				
120	"	same FeOx (a) veins wk ↑ smectite - perv wk ↑ druzy qtz w/ limon clay fill	(A)					"				"		.002		.13				
125	"	same mod. limon vns + clay	(A)					"				"		.004		<.10				
130	"	same ↓↓ perv limon w/ nontronite / smectite ↑ bleaching ↓ druzies + wk gray tan hue						LT GREEN WHITE				~2% diss + VN py		.003		<.10				
135	"	same perv / lt gray tan hue v. wk limon vns ↓ druzies						"				"		.003		<.10				
140	"	same wk ↑ smectite / nontronite ↓ druzies						"				"		.002		<.10				
145	"	same ↑ perv. argillic alt wk perv limonite ↓ druzies						"				"		.001		<.10				
150																				

LAC MINERALS U.S.A. INC.

PROJECT: ROSEBUD LOGGED BY: KLK HOLE NO. RE-30 PAGE 4 OF 8

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ARGILLIC W M S	SILICIFICATION W M S	PROPYLLITIC W M S	COLOR FINES	LIMONITE W M S	HEMATITE W M S	JAROSITE W M S	% SULFIDES	OTHER COMMENTS	Au	Au ✓	Ag	As	Hg	Sb	Se
150	GOOD	Bleached fragmental wk perv. arg alt weakly oxidized wk drusy qtz vns w/ FeOx fill wk perv. smectite 150-170 → wk perv. silicif.						BUFF				2% vn + diss py		.002		<.10				
155	"							"				"		.005		<.10				
160	"	162' wk fracturing ↓ smectite						"				"		.003		.28				
165	"	fn stkwk qtz						"				"		.003		.12				
170	"	PAY ZONE 170-223 mod fn gr tuff perv. silic = wk unoxidized + local fragmental drusy qtz vns ↑ sulfides						GRAY				3-4% vn + diss py		.008		<.10				
175	"	170-185 mod gray clay						"				"		.002		<.10				
180	"	↑ clay						"				"		.003		<.10				
185	"	Aa + ↑ drusy qtz vns						"				"		.002		.12				
190	"	192' - CAVE - 193 + Aated poss w/ stibnite						"				"		.001		<.10				
195	"	mod translucent gray silicification						"				" @ 3%		.001		<.10				
200																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-30 PAGE 5 OF 8

RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC W M S	ALTERATION: SILICIFICATION W M S	ALTERATION: PROPYLLITIC W M S	COLOR FINES	MINERALIZATION: LIMONITE W M S	MINERALIZATION: HEMATITE W M S	MINERALIZATION: JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au ✓	Ag	As	Hg	Sb	Se
200 GOOD	mixed fn gn tuff + local frag with silicified WK drusy qtz + OSHCWK local encapsul. sulfides, WK-mod pyr. argillic alt tr blK blaty fabricated frag JR?		Xk tr				WHITE gray				3% diss + vn py		.002		<.10				
205 "	205' moisture. mod str gray-green clay w/ pink blebs		Xk tr				"				"		.001		.12				
210 "	↑ bleaching ↑ clay alt w/ pink blebs		Xk tr				"				"		.002		<.10				
215 "	↑ bleaching ↑ clay alt w/ pink blebs		Xk tr				"				"		.001		<.10				
220 "	SGT - Lt green fine grained tuff fine grained charcl tuff 223 - 365' with pyr) green alt local wh fine stabik, WK pyr bl		Xk				Lt sage green				~2% diss ± vn py	tR limon replac py	<.001		<.10				
225 "	WK tan clay						"				"	"	<.001		<.10				
230 "							"				"	"	<.001		<.10				
235 "	WK off white clay						"				"	"	<.001		<.10				
240 "							"				"	"	<.001		<.10				
245 "							"				"	"	<.001		<.10				
250																			

LAC MINERALS U.S.A. INC.

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-30 PAGE 6 OF 8

RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC W M S	ALTERATION: SILICIFICATION W M S	ALTERATION: PROPYLLITIC W M S	COLOR FINES	MINERALIZATION: LIMONITE W M S	MINERALIZATION: HEMATITE W M S	MINERALIZATION: JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
GOOD	300-365 SGT Hard, lk sgr quartzite, weak perv. bleaching v. wk hairline stwk qtz, tr calcite, UNO local tr fair replac py		XK				Lt sgy Grn				1-2% diss py		.001		<.10				
"			XK				"				"		<.001		<.10				
"			XK				"				"		<.001		.33				
"			XK				"				"		<.001		<.10				
"			XK				"				"		<.001		<.10				
"			XK				"				"		<.001		<.10				
"			XK				"				"		<.001		<.10				
"			XK				"				"		<.001		.31				
"			XK				"				"		<.001		.28				
"	300-365 - same as above		XK				"				"		<.001		.13				

LAC MINERALS U.S.A. INC.

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-30 PAGE 7 OF 8

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLLITIC (W M S)	COLOR FINES	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
300		SGT same @ 250-255												<.001		.24				
305														<.001		.23				
310														<.001		.16				
315														<.001		.16				
320														<.001		.18				
325														<.001		.22				
330														<.001		.17				
335														<.001		.23				
340														<.001		.20				
345														<.001		.23				
350																				

LAC MINERALS U.S.A. INC.

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-30 PAGE 8 OF 8

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC W M S	ALTERATION: SILICIFICATION W M S	ALTERATION: PROPYLLITIC W M S	COLOR FINES	MINERALIZATION: LIMONITE W M S	MINERALIZATION: HEMATITE W M S	MINERALIZATION: JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
350		SGT same @ 250-255												<.001		.24				
355														<.001		<.10				
360														<.001		.19				
365		TD.																		
0																				
5																				
0																				
5																				
0																				
5																				
0																				

NEVADA

GEOCHEMICAL SERVICES, INC.

AUG 25 1989

GEOCHEMICAL ANALYSIS REPORT

August 23, 1989

Mr. Nate Brewer
LAC Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 57
GSI Number: 5181
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

Sample I.D.				Au o/t	Ag o/t
1 SAMPLE:	RL-30	0	5	0.002	<.10
2 SAMPLE:	RL-30	5	10	0.001	0.13
3 SAMPLE:	RL-30	10	15	0.002	0.13
4 SAMPLE:	RL-30	15	20	0.007	0.15
5 SAMPLE:	RL-30	20	25	0.010	<.10
6 SAMPLE:	RL-30	25	30	0.001	0.15
7 SAMPLE:	RL-30	30	35	0.002	0.10
8 SAMPLE:	RL-30	35	40	0.001	<.10
9 SAMPLE:	RL-30	40	45	0.002	<.10
10 SAMPLE:	RL-30	45	50	0.002	0.15
11 SAMPLE:	RL-30	50	55	0.002	<.10
12 SAMPLE:	RL-30	55	60	0.003	0.19
13 SAMPLE:	RL-30	60	65	0.004	0.12
14 SAMPLE:	RL-30	65	70	0.001	<.10
15 SAMPLE:	RL-30	70	75	0.006	<.10
16 SAMPLE:	RL-30	75	80	0.008	<.10
17 SAMPLE:	RL-30	80	85	0.003	0.15
18 SAMPLE:	RL-30	85	90	0.001	<.10
19 SAMPLE:	RL-30	90	95	0.002	<.10
20 SAMPLE:	RL-30	95	100	0.002	0.19
21 SAMPLE:	RL-30	100	105	0.002	<.10
22 SAMPLE:	RL-30	105	110	0.005	0.15
23 SAMPLE:	RL-30	110	115	0.028	<.10
24 SAMPLE:	RL-30	115	120	0.007	<.10
25 SAMPLE:	RL-30	120	125	0.002	0.13
26 SAMPLE:	RL-30	125	130	0.004	<.10
27 SAMPLE:	RL-30	130	135	0.003	<.10
28 SAMPLE:	RL-30	135	140	0.003	<.10
29 SAMPLE:	RL-30	140	145	0.002	<.10
30 SAMPLE:	RL-30	145	150	0.001	<.10
31 SAMPLE:	RL-30	150	155	0.002	<.10

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Sample I.D.	Au o/t	Ag o/t
32 SAMPLE: RL-30 155 160	0.005	<.10
33 SAMPLE: RL-30 240 245	<.001	<.10
34 SAMPLE: RL-30 245 250	<.001	<.10
35 SAMPLE: RL-30 250 255	0.001	<.10
36 SAMPLE: RL-30 255 260	<.001	<.10
37 SAMPLE: RL-30 260 265	<.001	0.33
38 SAMPLE: RL-30 265 270	<.001	<.10
39 SAMPLE: RL-30 270 275	<.001	<.10
40 SAMPLE: RL-30 275 280	<.001	<.10
41 SAMPLE: RL-30 280 285	<.001	<.10
42 SAMPLE: RL-30 285 290	<.001	0.31
43 SAMPLE: RL-30 290 295	<.001	0.28
44 SAMPLE: RL-30 295 300	<.001	0.13
45 SAMPLE: RL-30 300 305	<.001	0.24
46 SAMPLE: RL-30 305 310	<.001	0.23
47 SAMPLE: RL-30 310 315	<.001	0.16
48 SAMPLE: RL-30 315 320	<.001	0.16
49 SAMPLE: RL-30 320 325	<.001	0.18
50 SAMPLE: RL-30 325 330	<.001	0.22
51 SAMPLE: RL-30 330 335	<.001	0.17
52 SAMPLE: RL-30 335 340	<.001	0.23
53 SAMPLE: RL-30 340 345	<.001	0.20
54 SAMPLE: RL-30 345 350	<.001	0.23
55 SAMPLE: RL-30 350 355	<.001	0.24
56 SAMPLE: RL-30 355 360	<.001	<.10
57 SAMPLE: RL-30 360 365	<.001	0.19

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

NEVADA GSI GEOCHEMICAL SERVICES, INC.

AUG 21 1989

GEOCHEMICAL ANALYSIS REPORT

August 17, 1989

Mr. Nate Brewer
LAC Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 16
GSI Number: 5163A
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

	Sample I.D.	Au o/t	Ag o/t
1	SAMPLE: RL-30 160 165	0.003	0.28
2	SAMPLE: RL-30 165 170	0.003	0.12
3	SAMPLE: RL-30 170 175	0.008	<.10
4	SAMPLE: RL-30 175 180	0.002	<.10
5	SAMPLE: RL-30 180 185	0.003	<.10
6	SAMPLE: RL-30 185 190	0.002	0.12
7	SAMPLE: RL-30 190 195	0.001	<.10
8	SAMPLE: RL-30 195 200	0.001	<.10
9	SAMPLE: RL-30 200 205	0.002	<.10
10	SAMPLE: RL-30 205 210	0.001	0.12
11	SAMPLE: RL-30 210 215	0.002	<.10
12	SAMPLE: RL-30 215 220	0.001	<.10
13	SAMPLE: RL-30 220 225	<.001	<.10
14	SAMPLE: RL-30 225 230	<.001	<.10
15	SAMPLE: RL-30 230 235	<.001	<.10
16	SAMPLE: RL-30 235 240	<.001	<.10

This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

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