60001291

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-56
AUTHOR	K. Kenner; 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; Gustin Corp; Lac Minerals (USA) Inc [redacted]
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 450'; handwritten notes 13p

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)

	Initials	Date
SS:	DD	5/19/08
DB:	mah	
SCANNED:		

Revised: 1/22/08

DRILL LOGS RE-56
Rosebud

60001291 4010 ✓

60001291

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RD-56 TOTAL DEPTH 450' LOGGED BY KLK

Date started 11-19-89 0-310

Date completed 11-20-89 310-450

Initial bearing

Initial inclination vertical

Elevation ~~5122.5~~ 5066.6

Collar coordinates:

N ~~2203670~~ 2203574.0

E ~~479365~~ 479424.1

Contractor: GUSTIN CORP

Drill Type: RVC

Hole Size: 5 1/4"

Drilling Conditions: mod. due to ↑↑ clay + H2O

Footage: Wet / Dry Dry: 0-85'

Wet: 85' to TD.

Comments: intense clay alteration - made sampling techniques used large 17x24 cloth (white) bags to collect the fine clay mud

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)
0	450		-90				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RD-56 PAGE 1 OF 9

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
0	POOR	40- 30-40 Volcaniclastic 0-30 CHOCOLATE (COVER?)																		
		0-30 Lt to medium gray fine grained well sorted bleached & ox specular hematite. tr placed hand? pressed weak hematite clay locally weakly oxidized, tr chalcedony veins						Buff Brown				—		<.001		<.10				
5	"							"				—		<		<				
10	"							"				—		<		<				
15	"							"				—		<		<				
20	"			Xc				"				—		<		<				
25	GOOD			Xc				"				—		<		<				
30	"							"				—		<		<				
35	"	30-40 strongly oxidized possible (volcaniclastic) w/ strong limonite clay fine w. bleached and clay altered pass w/ chalcedony veins to 0mg						Golden Yellow				— ?		<		<				
40	"	OX/RE BOUNDARY		Xc				"				— ?		<		<				
45	"	40- strongly altered fine grained locally lithic tuff and well pervasively bleached mod buff clay intermittently weakly silicified pervasively mineralized local chalcedony veins moderately dense qtz encap sulfide veins pass to sphalerite + fine qtz stwk exact genisis is?						Buff				2% diss py		<		<				
50	"			Xc				"				"		<		<				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RD-56 PAGE 2 OF 9

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	50-100 Fine grained to lithic tuff continued w/ local hint of bentonite (?) alt ; locally brecciated		Xc				Buff				±3% diss +VN py		<.001		<.10				
55	"			Xc				"				"		.017		.26				
60	"							"				"		.004		.30				
65	"							"				"		.011		1.00				
70	"							"				3-4% diss +VN py ±arsenopy		.023		1.41				
75	POOR							"				"		.009		.57				
80	"	hit H2O weakly brecciated weak wk ; texture more granular						"				"		.012		1.55				
85	"							"				"		.032		2.41				
90	"							"				"		.006		.56				
95	"			Xc				"				"		.014		.15				
100																				

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PROJECT: ROSEBUD LOGGED BY: KUK HOLE NO. RD-56 PAGE 3 OF 9

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
100	POOR	100-105 Fine grained to granular tuff w/ local fragmental texture, ~1% drusy qtz encapsul. sulfide veins, weakly-pervasively silicified local line qtz stwk						Gray Buff				+3% diss +vn py + arsenopy? + marcasite		.014		<.10				
105	"	exact ages unknown due to amount of alteration						"				"		.001		.12				
110	"							"				"		<.001		<.10				
115	"	strong drusy qtz encapsulated sulfide veins						"				"		.008		1.31				
120	GOOD			Xc				"				"		.009		1.48				
125	"			Xc Xk				"				"		.006		.32				
130	"	w/ drusy qtz + marcasite veins						"				"		.003		<.10				
135	"	brecciation may be fragmental texture or vice versa						"				"		.004		<				
140	"							"				"		.003		<				
145	"							"				"		.015		<				
150																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RD-56 PAGE 4 OF 9

	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
150	Embedded	150-200 Granular to FGT continued w/ hint green alteration locally and intermittently fragmental predominantly granular, drusy qtz sulfide veins						Gray Buff				~2% diss PY		.002		<.10				
155	"							"				"		.001		<				
160	"			Xc				"				"		.001		<				
165	"							"				"		.001		<				
170	"							"				"		.001		<				
175	"			Xc				"				"		.003		<				
180	"							"				"		<.001		<				
185	"							"				"		<		<				
190	"							"				"		<		.10				
195	"							"				"		<		.12				
200																				

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PROJECT ROSEBUD LOGGED BY KUK HOLE NO. RO-S6 PAGE 5 OF 9

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
200	THBDMOM	200-250 granular tuff pervasively bleached; clay altered with perv. silicification; weak (0 tr) stockwork quartz veins (3-4% contamination)		Xc, Xk				gray buff				±3% diss ±vn py		<.001		.13				
205	"			Xc, Xk				"				"		<		.30				
210	"			Xc, Xk				"				"		<		<.10				
215	"			Xk				"				"		.001		<				
220	"	↑ silicification hit fracture when drilling FAULT?						"				"		.002		<				
225	"	↑ SiO2						"				"		.006		.55				
230	"							"				"		.004		1.05				
235	"			Xk				"				"		.001		<.10				
240	"	2% contamination						"				"		.001		.12				
245	"							"				"		<.001		<.10				
250		2-3% contamination																		

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RD-S6 PAGE 6 OF 9

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 ✓	Ag	As	Hg	Sb	Se
250	MTPOP03	250-300 fine grained granular tuff, vein silica is low temp chalcedony only in drusy QTZ veins		tr				gray buff				2-3% diss + vn py		.002		<.10				
255	"	2-5% contamination throughout						"				"		<.001		.15				
260	"			tr				"				"		.001		<.10				
265	"			xc				"				"		.002		<				
270	"			xc				"				"		.001		<				
275	"			xc				"				"		.002		<				
280	"							"				"		.004		<				
285	"	mod drusy QTZ sulfide veins		tr				"				"		.036		<				
290	"			tr				"				"		.062		<				
295	"			tr				"				"		.005		<.10				
300																				

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PROJECT: ROSEBUD LOGGED BY: KLK HOLE NO. RD-56 PAGE 7 OF 9

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
300	MISSING	Fault zone 300-310 ↑ bleaching brecciated mod well silicified w/ blue gray fine silicide rich chalcedony w/ adsorb mod white clay		xc				gray bubb				±3% fn diss ±vn py ± marcasite		.008		.84				
305	"			xc				"				"		.006		.57				
310	"	300-350 Fine grained to granular tuff continued						"				"		.009		.16				
315	"							"				" @ 2-3%		.003		<.10				
320	"							"				"		.003		<				
325	GOOD	mod str blue gray calcedonic silicific breccia		xc				"				3-4% fine diss tvn py		.003		<				
330	"			xc				"				"		.002		<				
335	"							"				2-3% fine diss ±vn py		.001		<				
340	"			xc				"				"		.002		<				
345	"							"				"		.004		<				
350																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RD-56 PAGE 8 OF 9

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
350	50%	350-400 granular to fine grained tuff continued						gray buff				~2% diss FVN PY Tarsenopy		.001		<.10				
355	"							"				"		.001		<				
360	"							"				"		.001		<				
365	"			HM				"				"		.003		<				
370	"	shit weak clay zone w/ 1% py						"				"		.001		<				
375	"	weak pervasive silicification w/ a 500c drusy qtz-sulfide veins and chalcedony veinlets local dark gray sulfide (Ag?) w/ hydrusyrno		Xc				"				" @ 2-3%		.001		.16				
380	"			Xc				"				"		.002		.14				
385	"			Xc HM				"				"		.003		.15				
390	"			Xc HM				"				"		.002		<.10				
395	"			HM Xc				"				"		.002		<				
400																				

LAC MINERALS U.S.A. INC.

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RD-56 PAGE 9 OF 9

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	GRAPHIC ALTERATION	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (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
400	G O O D	400-450 Granular to fine grained tuff continued w/ ↑ % sugary qtz vns & fine qtz stockwork local silicified microbrecciation 400-425 ↑ bleaching						gray buff				3-4% diss + vnl py ± arsenopy.		.003		<.10				
405	"							"				"		.002		<				
410	"							"				"		.004		.13				
415	"	white clay fill in drusy qtz vns						"				"		.004		<.10				
420	"							"				"		.006		.15				
425	"	weak hot montmorillonite alt?						"				"		.004		.18				
430	"							"				"		.004		<.10				
435	"							"				"		.004		<				
440	"							"				"		.006		<				
445	"							"				"		.003		.14				
450																				

T.D.

NEVADA

GSI

GEOCHEMICAL SERVICES, INC.

GEOCHEMICAL ANALYSIS REPORT

December 14, 1989

Ms. Kristen Kenner
Lac Minerals
1395 Greg Street #107
Sparks, Nv. 89431

Number of Samples: 90
Project: UDBO-79004
GSI Number: 6161
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

	Sample I.D.				Au o/t	Ag o/t
1	SAMPLE:	RD-56	0	5	<.001	<.10
2	SAMPLE:	RD-56	5	10	<.001	<.10
3	SAMPLE:	RD-56	10	15	<.001	<.10
4	SAMPLE:	RD-56	15	20	<.001	<.10
5	SAMPLE:	RD-56	20	25	<.001	<.10
6	SAMPLE:	RD-56	25	30	<.001	<.10
7	SAMPLE:	RD-56	30	35	<.001	<.10
8	SAMPLE:	RD-56	35	40	<.001	<.10
9	SAMPLE:	RD-56	40	45	<.001	<.10
10	SAMPLE:	RD-56	45	50	<.001	<.10
11	SAMPLE:	RD-56	50	55	<.001	<.10
12	SAMPLE:	RD-56	55	60	0.017	0.26
13	SAMPLE:	RD-56	60	65	0.004	0.30
14	SAMPLE:	RD-56	65	70	0.011	1.00
15	SAMPLE:	RD-56	70	75	0.023	1.41
16	SAMPLE:	RD-56	75	80	0.009	0.57
17	SAMPLE:	RD-56	80	85	0.012	1.55
18	SAMPLE:	RD-56	85	90	0.032	2.41
19	SAMPLE:	RD-56	90	95	0.006	0.56
20	SAMPLE:	RD-56	95	100	0.014	0.15
21	SAMPLE:	RD-56	100	105	0.014	<.10
22	SAMPLE:	RD-56	105	110	0.001	0.12
23	SAMPLE:	RD-56	110	115	<.001	<.10
24	SAMPLE:	RD-56	115	120	0.008	1.31
25	SAMPLE:	RD-56	120	125	0.009	1.48
26	SAMPLE:	RD-56	125	130	0.006	0.32
27	SAMPLE:	RD-56	130	135	0.003	<.10
28	SAMPLE:	RD-56	135	140	0.004	<.10
29	SAMPLE:	RD-56	140	145	0.003	<.10
30	SAMPLE:	RD-56	145	150	0.015	<.10
31	SAMPLE:	RD-56	150	155	0.002	<.10
32	SAMPLE:	RD-56	155	160	0.001	<.10

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	Sample I.D.				Au o/t	Ag o/t
33	SAMPLE:	RD-56	160	165	0.001	<.10
34	SAMPLE:	RD-56	165	170	0.001	<.10
35	SAMPLE:	RD-56	170	175	0.001	<.10
36	SAMPLE:	RD-56	175	180	0.003	<.10
37	SAMPLE:	RD-56	180	185	<.001	<.10
38	SAMPLE:	RD-56	185	190	<.001	<.10
39	SAMPLE:	RD-56	190	195	<.001	0.10
40	SAMPLE:	RD-56	195	200	<.001	0.12
41	SAMPLE:	RD-56	200	205	<.001	0.13
42	SAMPLE:	RD-56	205	210	<.001	0.30
43	SAMPLE:	RD-56	210	215	<.001	<.10
44	SAMPLE:	RD-56	215	220	0.001	<.10
45	SAMPLE:	RD-56	220	225	0.002	<.10
46	SAMPLE:	RD-56	225	230	0.006	0.55
47	SAMPLE:	RD-56	230	235	0.001	<.10
48	SAMPLE:	RD-56	235	240	0.001	0.12
49	SAMPLE:	RD-56	240	245	<.001	<.10
50	SAMPLE:	RD-56	245	250	0.002	<.10
51	SAMPLE:	RD-56	250	255	<.001	0.15
52	SAMPLE:	RD-56	255	260	0.001	<.10
53	SAMPLE:	RD-56	260	265	0.002	<.10
54	SAMPLE:	RD-56	270	275	0.001	<.10
55	SAMPLE:	RD-56	275	280	0.002	<.10
56	SAMPLE:	RD-56	280	285	0.004	<.10
57	SAMPLE:	RD-56	285	290	0.030	<.10
58	SAMPLE:	RD-56	290	295	0.062	<.10
59	SAMPLE:	RD-56	295	300	0.005	<.10
60	SAMPLE:	RD-56	300	305	0.008	0.84
61	SAMPLE:	RD-56	305	310	0.006	0.57
62	SAMPLE:	RD-56	310	315	0.009	0.16
63	SAMPLE:	RD-56	315	320	0.003	<.10
64	SAMPLE:	RD-56	320	325	0.003	<.10
65	SAMPLE:	RD-56	325	330	0.003	<.10
66	SAMPLE:	RD-56	330	335	0.002	<.10
67	SAMPLE:	RD-56	335	340	0.001	<.10
68	SAMPLE:	RD-56	340	345	0.002	<.10
69	SAMPLE:	RD-56	345	350	0.004	<.10
70	SAMPLE:	RD-56	350	355	0.001	<.10
71	SAMPLE:	RD-56	355	360	0.001	<.10
72	SAMPLE:	RD-56	360	365	0.001	<.10
73	SAMPLE:	RD-56	365	370	0.003	<.10
74	SAMPLE:	RD-56	370	375	0.001	<.10
75	SAMPLE:	RD-56	375	380	0.001	0.16
76	SAMPLE:	RD-56	380	385	0.002	0.14
77	SAMPLE:	RD-56	385	390	0.003	0.15
78	SAMPLE:	RD-56	390	395	0.002	<.10
79	SAMPLE:	RD-56	395	400	0.002	<.10
80	SAMPLE:	RD-56	400	405	0.003	<.10

	Sample I.D.				Au o/t	Ag o/t
81	SAMPLE:	RD-56	405	410	0.002	<.10
82	SAMPLE:	RD-56	410	415	0.004	0.13
83	SAMPLE:	RD-56	415	420	0.004	<.10
84	SAMPLE:	RD-56	420	425	0.006	0.15
85	SAMPLE:	RD-56	425	430	0.004	0.18
86	SAMPLE:	RD-56	430	435	0.004	<.10
87	SAMPLE:	RD-56	435	440	0.004	<.10
88	SAMPLE:	RD-56	440	445	0.006	<.10
89	SAMPLE:	RD-56	445	450	0.003	0.14
90	SAMPLE:	RD-56	225	230 A	0.004	1.05

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager