DRILL LOGS RE-65

ROSEBUD

4010 0032

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RE-65 TOTAL DEPTH 580' LOGGED BY KLK

Date started MAR. 25, 1990

Date completed Mar. 25, 1990

Initial bearing S 56° E

Initial inclination -65°

Elevation 5246.3

Collar coordinates:

N 2,203,524.0

E 481,276.0

Contractor: EKLUND DRILLING

Drill Type: RVC - MPD-1000

Hole Size: hammer 4 3/4"

Drilling Conditions: good

Footage: Wet / Dry DRY: 0-255

WET: 255 to T.D.

Comments:

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLINATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)
0	50		-65	S56E			
50	150		-67	"			
150	250		-69	"			
250	350		-71	"			
350	450		-73	"			
450	550		-75	"			
550	580		-75.5	"			

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 RE-65

LOGGED BY KLK

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	
														0-20				
	A	XK XC HH							org buff				trace relict diss py	Silicified breccia cap weakly oxidized; bleached w/ stockwork qtz vns	.002	<		
05	A	HH XC XK							"				"	qtz stockwork ± bxal drusy qtz vns local wisps w/ buff org clay alt	.002	<		
10	A	XK HH							"				"	Original texture unidentifiable	.001	<		
15	A	XK HH							"				"		.001	<		
20	V	XC HH							green org				<1% relict FeOx replac py	20-150 fine grained tuff w/ local crumb texture 20-65 mod pervasive silicified and oxidized local bxae qtz stockwork + drusy qtz ± local chalcedonic vns	.001	<		
25		XC HH XC							"				diss py		.005	<		
30		XC XK HH							"				"	@ 65' and ↓ have ↑ bx and ↓ FeOx ↓ SiO2	.001	<		
35		XK HH XC							"				"		.004	<		
40		XC HH XC							"				~1% FeOx replac py		.002	<		
45		XK HH XC							"				<1% relict FeOx replac	grossanous	.001	<		
50		XK XC HH							"				diss py		.002	<		
55		XK HH XC							"				"		.002	<		
60		XK HH XC							"				"	65-150 may be a welded fragmental (pyroclastic) gravity	.003	<		
65		XK HH XC							"				"	65-100' ↑ bx ↓ FeOx ↓ silicific	.002	<		
70	A	HH XC XC							buff ± org				"		.004	.19		
75		XK HH XC							"				"		.002	<		
80		HH XC							"				"		.003	.14		
85		HH XC							"				"		.002	<		
90		HH XC							"				"		.002	.14		
95		HH XC							"				"		.002	<		
100		HH XC							"				"					

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DRILL HOLE RE-65

Page 2 of 6

LOGGED BY KLK

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	
05									orng buff				<1% relict fe/pb ± py	65-150 Oxidized-weakly granular tuff which may be welded pyro-	.002	<		
10		XK ± HH							"				diss. py	mod well bleached by local silicic ghosts of fragmental texture weak pervasive	.003	<		
15		± HH							"				"	stain, whity pervasive bleached	.001	<		
20		± HH							"				"		.002	<		
25		± HH							"				"	wh. red org clays	.003	<		
30		± HH							"				"		.006	<		
35		± HH							"				"		.001	<		
40		± HH							"				"		.007	.16		
45		± HH							"				"		.003	.13		
50		XK XC							"				"	OX	.003	<		
55		XC P							lt grey white				2-3% diss + vnlt py	150-260 RE	.002	<		
60		P							purple white				"	Green fine grained tuff vwk, grnish clay at ± bd 160-170 purple color	.003	<		
65		XC ± P							"				"	→ wk-mod local chalcedony vnlts & local fine grn stockwork poss wh chert vns local white waxy clay vns & trace drzy qtz vns	.003	.11		
70		XC P							"				"		.003	.21		
75		XK P							lt gray green				~2% diss + vnlt py		.002	<		
80		XK XC P							"				"		.001	<		
85		XC XK P							"				"		.001	.30		
90		XK P							"				"		.001	<		
95		XC XK P							"				"		.003	<		
100		± HH XK P							"				"		.006	<		

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DRILL HOLE RE-65

LOGGED BY KLK

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	
05		P							mottled peach + green				± 3% diss + VN	150-260 Tuff (continued) (205-260) → mottled green +	.004	<		
10		P							"				py	flesh colored locally weakly silicified, wk pervasive bleaching, local	.002	<		
15		XC XK							"				"	fine qtz stockwork ± chalced ± py ± white clay vns wk chl vn qtz vns	.001	<		
20		XK XC							"				"	↑ granular text. w/ depth	.001	<		
25		XK XC							"				"	no sample taken missed - went TO H20				
30		XC P							"				"	local Alation	.003	<		
35		XC XK P							"				"		.002	<		
40		XC XK P							"				"		.006	<		
45		XC XK P							"				"	240-260 ↑ peach alt wk ↑ pervasive silica	.007	<		
50		XC XK P							"				"		.004	<		
55		XC XK P							"				"		.001	<		
60		XK XC							"				"	2nd's taken	.004	<		
65		XC P							lt green white				± 2% diss + VN	260-300 Bleached green/white	.001	<		
70		XC P							"				py	mixed tuff w/ local fragm. component mod pervasive clay alt weak pervasive smectite	.005	<		
75		XC P							"				"	alt wh. chalc. ± py ± white clay vns	.001	<		
80		XC P							"				"		.001	.11		
85		XC P							"				"	280-295 wk strong white clay gouge chalc.	.002	.11		
90		XC P							"				"	vns mod str chalced (milky) vns	.001	<		
95		XC P							"				"		.003	<		
00		XC P							"				"		.006	<		

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DRILL HOLE RE-65

LOGGED BY KLK

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	
305	v v	~ Xc P							lt grey peach buff				~2% diss ±VN py	300-390 mottled lt white grey and peach pyroclast bl local tuffaceous beds	.004	<		
310	v v	~ Xc P							"				"	weak to mod perv bleaching intermittent clay alt beds	.004	<		
315	v v	~ Xc P							"				"	mod strong clay (white) alt	.003	.14		
320	v v	~ tttt P Xc							"				"		.004	<		
325	v v	~ Xc X tttt P							"				"		.004	<		
330	v v	~ tttt Xc P X							"				"	↑ H2O	.008	.10		
335	v v	~ tttt Xc P							"				"		.006	.15		
340	v v	~ tttt Xc P							"				"	335-345 ↑ bl	.011	.12		
345	v v	~ tttt Xc P							"				"	↓ whity mod clay alt	.006	.18		
350	v v	~ P tttt Xc							"				3% diss+ VN py	345-390 ↓ bl	.013	.21		
355	v v	~ tttt P							"				"		.04	.29		
360	v v	~ Xc Xc tttt P							"				"		.182	.79		
365	v v	~ Xc P							"				"		.044	.35		
370	v v	~ Xc Xc P							"				"		.024	.19		
375	v v	~ Xc P							"				"		.052	.51		
380	v v	~ Xc X P							"				"		.023	.20		
385	v v Δ	~ Xc X P							"				"		.032	.26		
390	v v	~ Xc X P							"				"		.02	<		
395		~ Xc X							grey buff				4%+ diss +VN py	390-500 Gray buff FGT wh perv bl	.036	2.93		
400		~ Xc X							"				"	whity silicific, wk qtz stkwk $ zone	.028	2.78		

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DRILL HOLE RE-65
Page 5 of 6
LOGGED BY KLK

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
405		~							gray buff				3-4% pyrite + tr	390-500 Gray buff fine grained tuff with pyr bleaching wk laminate	.073	3.25	
410	V V	~							"				PP	Stockwork locally laminated - flow banded potential pay zone	.039	.44	
415		~							"				"	intermittent Potentially silicified local chalcedonic, local diatom	.007	.14	
		~ XK ++++							"				"		.016	.16	
420	Δ Δ	~							"				"		.006	<	
425	Δ	~ XC							"				"		.007	<	
430		~ XC ++++							"				"		.007	<	
435		~ ++++							"				@1" 4% to 5%		.008	<	
440		~							"				@1" 3-4%		.004	<	
445		~ XK							"				"		.006	<	
450	Δ	~ XC ++++							"				@1" 3-4%		.013	<	
455		~							"				"		.011	<	
460		~ XC XK							"				"		.010	.21	
465		~ ++++							"				"		.006	<	
470		~ ++++ XK							"				"		.009	<	
475		~ XK X							"				"		.015	<	
480	Δ	~ ++++							"				"	480-500 intermittent brecciated with orange alt	.010	<	
485	Δ	~ ++++							"				"		.015	<	
490	Δ	~ ++++							"				"		.025	<	
495	Δ	~ ++++							"				"		.021	<	
500																	

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

DRILL HOLE RE-65

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CHOCOLATE TUFF
BUD BRECCIA
BUD TUFF
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BUD TUFF BRECCIA
DOZER WELDED TUFF

ARGILLIC
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LOGGED BY KLK

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
05		Xc							flesh				±3% diss +VN	500-560 flesh tuff ∯ high grade zone*	.013	.58	
10		Xc Xk							"				py	pervasive brecciation w/ 2-4 stages of Δ ation local druzy qtz vns	.019	.32	
15		Xk							"				"	pervasive silicified intern. fine qtz stockwork, local druzy qtz-pyrite vns	.021	.21	
20		Xk							"				"		.044	1.42	
25		Xc							"				"		.02	.30	
30		Xc							"				"		.036	.26	
35		Xk							"				"		.008	.13	
40		Xk							"				"		.018	.28	
45		Xk							"				"		.061	.54	
50		Xk							"				"		.043	.52	
55		Xk							"				3-4% diss +VN py		.011	.45	
60		Xc							"				4-5% diss +VN py		.016	.21	
65		Ca							sage grn				1-2% diss py	560-580 grn Dozer Tuff - fine grained, densely welded, wk green stockwork w/ inter-	.007	.21	
70		Xc Ca							"				"	mittent bleaching w/ $CaCO_3$ vns	.004	.13	
75									"				"		.006	.17	
80		Xc							"				"	580 T.D.	.008	.35	
85																	
90																	
95																	
00																	

NEVADA GSI

APR 16 1990

GEOCHEMICAL ANALYSIS REPORT

April 10, 1990

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

Number of Samples: 115
Project: URBD-79014
GSI Number: 6819
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

	Sample I.D.			Au o/t	Ag o/t
1.	RE-65	0	5	0.002	<.10
2.	RE-65	5	10	0.002	<.10
3.	RE-65	10	15	0.001	<.10
4.	RE-65	15	20	0.001	<.10
5.	RE-65	20	25	0.001	<.10
6.	RE-65	25	30	0.005	<.10
7.	RE-65	30	35	0.001	<.10
8.	RE-65	35	40	0.004	<.10
9.	RE-65	40	45	0.002	<.10
10.	RE-65	45	50	0.001	<.10
11.	RE-65	50	55	0.002	<.10
12.	RE-65	55	60	0.002	<.10
13.	RE-65	60	65	0.003	<.10
14.	RE-65	65	70	0.002	<.10
15.	RE-65	70	75	0.004	0.19
16.	RE-65	75	80	0.002	<.10
17.	RE-65	80	85	0.003	0.14
18.	RE-65	85	90	0.002	<.10
19.	RE-65	90	95	0.002	0.14
20.	RE-65	95	100	0.002	<.10
21.	RE-65	100	105	0.002	<.10
22.	RE-65	105	110	0.003	<.10
23.	RE-65	110	115	0.001	<.10
24.	RE-65	115	120	0.002	<.10
25.	RE-65	120	125	0.003	<.10
26.	RE-65	125	130	0.006	<.10
27.	RE-65	130	135	0.004	<.10
28.	RE-65	135	140	0.007	0.16
29.	RE-65	140	145	0.003	0.13
30.	RE-65	145	150	0.003	<.10
31.	RE-65	150	155	0.002	<.10
32.	RE-65	155	160	0.003	<.10
33.	RE-65	160	165	0.003	0.11
34.	RE-65	165	170	0.003	0.21

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	Sample I.D.			Au o/t	Ag o/t
35.	RE-65	170	175	0.002	<.10
36.	RE-65	175	180	0.001	<.10
37.	RE-65	180	185	0.001	0.30
38.	RE-65	185	190	0.001	<.10
39.	RE-65	190	195	0.003	<.10
40.	RE-65	195	200	0.006	<.10
41.	RE-65	200	205	0.004	<.10
42.	RE-65	205	210	0.002	<.10
43.	RE-65	210	215	0.001	<.10
44.	RE-65	215	220	0.001	<.10
45.	RE-65	225	230	0.003	<.10
46.	RE-65	230	235	0.002	<.10
47.	RE-65	235	240	0.006	<.10
48.	RE-65	240	245	0.007	<.10
49.	RE-65	245	250	0.004	<.10
50.	RE-65	250	255	0.001	<.10
51.	RE-65	255	260	0.004	<.10
52.	RE-65	260	265	0.001	<.10
53.	RE-65	265	270	0.005	<.10
54.	RE-65	270	275	0.001	<.10
55.	RE-65	275	280	0.001	0.11
56.	RE-65	280	285	0.002	0.11
57.	RE-65	285	290	0.001	<.10
58.	RE-65	290	295	0.003	<.10
59.	RE-65	295	300	0.006	<.10
60.	RE-65	300	305	0.004	<.10
61.	RE-65	305	310	0.004	<.10
62.	RE-65	310	315	0.003	0.14
63.	RE-65	315	320	0.004	<.10
64.	RE-65	320	325	0.004	<.10
65.	RE-65	325	330	0.008	0.10
66.	RE-65	330	335	0.006	0.15
67.	RE-65	335	340	0.011	0.12
68.	RE-65	340	345	0.006	0.18
69.	RE-65	345	350	0.013	0.21
70.	RE-65	350	355	0.040	0.29
71.	RE-65	355	360	0.182	0.79
72.	RE-65	360	365	0.044	0.35
73.	RE-65	365	370	0.024	0.19
74.	RE-65	370	375	0.052	0.51
75.	RE-65	375	380	0.023	0.20
76.	RE-65	380	385	0.032	0.26
77.	RE-65	385	390	0.020	<.10
78.	RE-65	390	395	0.036	2.93
79.	RE-65	395	400	0.028	2.78
80.	RE-65	400	405	0.073	3.25
81.	RE-65	405	410	0.039	0.44

	Sample	I.D.		Au o/t	Ag o/t
82.	RE-65	410	415	0.007	0.14
83.	RE-65	415	420	0.016	0.16
84.	RE-65	420	425	0.006	<.10
85.	RE-65	425	430	0.007	<.10
86.	RE-65	430	435	0.007	<.10
87.	RE-65	435	440	0.008	<.10
88.	RE-65	440	445	0.004	<.10
89.	RE-65	445	450	0.006	<.10
90.	RE-65	450	455	0.013	<.10
91.	RE-65	455	460	0.011	<.10
92.	RE-65	460	465	0.010	0.21
93.	RE-65	465	470	0.006	<.10
94.	RE-65	470	475	0.009	<.10
95.	RE-65	475	480	0.015	<.10
96.	RE-65	480	485	0.010	<.10
97.	RE-65	485	490	0.015	<.10
98.	RE-65	490	495	0.025	<.10
99.	RE-65	495	500	0.021	<.10
100.	RE-65	500	505	0.013	0.58
101.	RE-65	505	510	0.019	0.32
102.	RE-65	510	515	0.021	0.21
103.	RE-65	515	520	0.044	1.42
104.	RE-65	520	525	0.020	0.30
105.	RE-65	525	530	0.036	0.26
106.	RE-65	530	535	0.008	0.13
107.	RE-65	535	540	0.018	0.28
108.	RE-65	540	545	0.061	0.54
109.	RE-65	545	550	0.043	0.52
110.	RE-65	550	555	0.011	0.45
111.	RE-65	555	560	0.016	0.21
112.	RE-65	560	565	0.007	0.21
113.	RE-65	565	570	0.004	0.13
114.	RE-65	570	575	0.006	0.17
115.	RE-65	575	580	0.008	0.35

This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

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

BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-10373.4

DATE PRINTED: 7-MAR-91

PROJECT: 75351 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
P4 RE35 475-480		0.012		
P4 RE35 480-485		0.018		
P4 RE35 485-490		0.023		
P4 RE35 490-495		0.044		
P4 RE35 495-500		0.023		
P4 RE35 500-505		0.024		
P4 RE35 505-510		0.003		
P4 RE35 510-515		0.080		
P4 RE35 515-520		0.009		
P4 RE35 520-525		0.003		
P4 RE35 525-530		0.009		
P4 RE35 530-535		0.020		
P4 RE35 535-540		0.035		
P4 RE35 540-545		0.021		
P4 RE58 555-560		0.015		
P4 RE58 560-565		0.018		
P4 RE58 565-570		0.036		
P4 RE58 570-575		0.117	0.132	
P4 RE58 575-580		0.028		
P4 RE58 580-585		0.031		
P4 RE58 585-590		0.019		
P4 RE58 590-595		0.012		
P4 RE58 595-600		0.016		
P4 RE65 330-335		0.004		
P4 RE65 335-340		0.008		
P4 RE65 340-345		0.005		
P4 RE65 345-350		0.011		
P4 RE65 350-355		0.035		
P4 RE65 355-360		0.192		
P4 RE65 360-365		0.039		
P4 RE65 365-370		0.026		
P4 RE65 370-375		0.053		
P4 RE65 375-380		0.025		
P4 RE65 380-385		0.022		
P4 RE65 385-390		0.014		
P4 RE65 390-395		0.031		
P4 RE65 395-400		0.025		
P4 RE65 400-405		0.059		
P4 RE65 405-410		0.035		
P4 RE65 410-415		0.007		

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
P4 RE65 415-420		0.010		
P4 RE65 420-425		0.008		
P4 RE65 425-430		0.008		
P4 RE65 430-435		0.008		
P4 RE65 435-440		0.005		
P4 RE67 560-565		0.008		
P4 RE67 565-570		0.003		
P4 RE67 570-575		0.048		
P4 RE67 575-580		0.041		
P4 RE67 580-585		0.007		
P4 RE67 585-590		0.007		
P4 RE67 590-595		0.021		
P4 RE67 595-600		0.003		
P4 RE67 600-605		0.005		
P4 RE67 605-610		0.005		
P4 RE67 610-615		0.003		
P4 RE67 615-620		0.012		
P4 RE67 620-625		0.015		
P4 RE67 625-630		0.008		
P4 RE67 630-635		0.008		
P4 RE67 635-640		0.063		
P4 RE67 750-755		0.026		
P4 RE67 755-760		0.024		
P4 RE67 760-765		0.009		
P4 RE67 765-770		0.004		
P4 RE67 770-775		0.003		
P4 RE67 775-780		0.010		
P4 RE67 780-785		0.013		
P4 RE67 785-790		0.012		
P4 RE67 790-795		0.006		
P4 RE67 795-800		0.009		
P4 RE67 800-805		0.008		
P4 RL70C 635-640		0.017		
P4 RL70C 640-645		0.038		
P4 RL70C 645-650		0.051		
P4 RL70C 650-655		0.006		
P4 RL70C 655-660		0.017		
P4 RL70C 660-665		0.004		
P4 RL70C 665-670		0.075		
P4 RL70C 670-675		0.006		