DRILL LOGS
Rosebud

RE-27

4010 0030

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RE-27 TOTAL DEPTH 580' LOGGED BY KLK

Date started July 29 0-465'
July 30 465'-580'

Date completed

Initial bearing —

Initial inclination vertical

Elevation 5308.6

Collar coordinates:

N 2203346

E 481480.5

Contractor: Environmental West Exploration

Drill Type: Reverse Circulation: Reich 650

Hole Size: Hammer 5½" 0-543' Tricone 5¼" 543' to T.D.

Drilling Conditions: good except for fault from 525-535 poor recovery

Footage: Wet / Dry DRY 0-285'

WET: 285' to TD.

pulling rods in/out 11:30 2:30

Comments:

320' hit ↑ H_2O

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)
0	580		-90				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 1 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION Chocolate Tuff	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
0	GOOD	Fine gr, buff tuff, mod well perv silicified perv bleached, wh local white clay alt of lithic clasts - local hydroth dia vnlt wh fine hairline stwk qtz, wh to mod drusy qtz vnlt w/ limonitic to red orange clay fill qtz perv weakly oxidized w/ chl alt biotite phenos						orange buff				tr relict limon replac py casts		.001		<.10				
5		Same w/ ↓ dia						Red orange				"		.001		<.10				
10	"	Same w/ wk ↓ perv limonite						"				"		.002		<.10				
15	"	Same w/ ↑ zones argillic clay alt hit clay zone ↑ perv FeOx						"				"		.001		<.10				
20	"	Same ↓ drusies ↑ hematite zones of wk clay alt						"				"		.002		.12				
25	"	Same w/ ↑ perv limonitic clay only tr hematite + to red org clay						"				"		.001		<.10				
30	"	Same w/ ↑ limonitic clay ↑ red orange clay						orange buff				"		<.001		<.10				
35	"	Same w/ ↑ perv. limonite with red org clay w/ zones of org clay alt ↓ dia						mod str brick red org				"		<.001		<.10				
40	"	Same w/ mod str red orange clay w/ assoc qtz + mgons + ↑ perv limon clay w/ zones of argillic alt						strong brick red orang				"		<.001		<.10				
45		Same w/ ↑ drusy clay fill qtz vns w/ assoc FeOx mgn?						Red org				"		<.001		.28				
50																				

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PROJECT: ROSEBUD LOGGED BY: KLK HOLE NO. RE-27 PAGE 2 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION: Chocolate	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	fine grained pervasive silicic w/ zones of ↑ argillic alt. pervasive bleached to buff moderate to w/ hairline stockwk qtz + FeOx clay fill drusy qtz vns w/ local mod assoc ± goethite & local micro alum vns to white clay + chl						ORG BUFF				trace relict diss limon replac py		.004		.11				
55	"	same w/ slight ↑ hemitite						"				"		.001		.12				
60	"	same w/ wk ↓ pervasive limon clay						"				" ± wk ↑		.001		<.10				
65	"	same w/ ↓ pervasive limon clay wk ↑ argillic alt.						"				"		<.001		.13				
70	"	same w/ ↑ limonitic clay w/ brown oxide filling drusy qtz vns						"				≤1% limon replac py		<.001		<.10				
75	"	same w/ ↑ pervasive FeOx + limonitic clay ↑ hemitite						"				" @ ~1%		.002		.23				
80	"	same w/ ↑ pervasive limon + limon clay + w/ brown (goethite) drusy qtz fill						"				"		.001		<.10				
85	"	same wk ↑ pervasive argillic clay alt ↓ pervasive FeOx (limon) wk ↑ hemitite						"				" @ ≤1%		.001		.25				
90	"	same w/ ↓ pervasive FeOx ↑ argillic clay alt wk ↓ drusy + stockwk qtz						"				"		.001		<.10				
95		same wk ↑ pervasive limon						"				"		.001		<.10				
100																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 3 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION: Chocolate	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
100	GOOD	Fine gr bubbly, whey perv arg clay alt with perv. silicification 101-102 VOID wk-mod perv limon ± limon clay wk stkwk + drusy qtz vns w/ local limon clay fill oxidation & local goethite						yellow BUFF				<1% relic diss limon replac py		.001		<.10				
105	"	Same						"				"		.001		<.10				
110	"	Same w/ ↑ drusy qtz vns w/ limon; limon clay ↑ perv limon						"				"		.001		<.10				
115	"	Same w/ ↓ perv. limonite ↑ hemitite ↓ drusy + stkwk qtz vns 118-119 strongly fractured						"				1% FeOx replac py		.001		<.10				
120	"	Same w/ ↑ stkwk + drusy qtz vns w/ limonitic clay fill w/ grainy epiclastic innerbeds						"				" @ ≤1%		.001		<.10				
125	"	Same w/ grainy epiclastic innerbeds						"				"		.001		.37				
130	"	Same wk red org clay ↓ limon clay w/ grainy epiclastic innerbeds						"				"		.001		<.10				
135	"	Same w/ strong red orange clay w/ epiclastic innerbeds + ↑ hemitite						strong red org				<1% FeOx replac py		.002		<.10				
140	"	Same w/ grainy epiclastic innerbeds ↓ perv FeOx wk red org clay filling cavities						Red org				"		.005		<.10				
145	"	Same w/ strong perv limon + hemit wk red org clay local clay alt biotite stringers						"				" @ +1%		.005		.10				
150																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 4 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION 160' CONTACT – CHOCOLATE / BUD Δia	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	GOOD	Well oxidized chocolate tuff – fn gr bleached wh-mod perv silicification, wh-perv. arg clay alt mod hairline stwk + drusy qtz uno w/ FeOx clay fill ± goethite locally Δiated						STR RED ORG				+ 1% FeOx replac py		<.001		<.10				
155	"	same w/ wh red orange clay						yellow ORG				"		<.001		<.10				
160	"	Bud Δia – fragmental perv. silicified 162' – fractured wk perv chl alt bleached wh red orange clay wh-mod drusy qtz w/ FeOx + clay fill ± goethite, wk hairline stwk qtz uno						"				tr relict py casts		.001		<.10				
165	"	same only tr relcors clay ↑ perv. clay alt ↓ perv. silicif. only local SiO2						ORG yellow				"		<.001		<.10				
170	"	same w/ white clay w/ ↑ perv. argillic clay alt wh red org clay wk seams silicif.						orange + yellow				"		<.001		<.10				
175	"	same w/ ↑ perv. argillic clay alt wh white hard clay ↑ perv. FeOx						creamy yellow				"		<.001		.15				
180	"	same w/ ↑ perv. lemon clay wk perv silicification						Golden yellow				" @ ~1%		.001		<.10				
185	"	same w/ strong red org clay wh perv silicification w/ zones of strong argillic alt						RED ORANGE				"		.002		.17				
190	FAULT	same – Bud – mod str perv. sea green propyllitic alt – unoxidized wk white clay tr drusy qtz clay alt v clasts to FeOx clay	FAULT					GREEN				1% diss + vn py		<.001		<.10				
195	"	same @ 190-195 only tr white clay						"				" @ 2%		<.001		<.10				
200																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 5 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION (Bud Dia)	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	Bud Breccia fragmental, wkly perv silicified locally clasts clay alt + wk white clay + wk limon clay, wk drusy qtz vns & deep sea green						GREEN				≤1% fine diss ±vn py		<.001		<.10				
205	"	Same w/ ↑ limon clay filled drusy qtz vns, ↑ some bleaching associated ↑ sulfides w/ local SiO2 encap py						"				~2% @ above		<.001		<.10				
210	"	Same @ 200-205 v. wk local bleaching wk yellow clay						"				" @ ~1%		<.001		<.10				
215	"	Same @ 200-205 clasts perv clay alt 218' Damp wk limon clay						"				"		<.001		<.10				
220	"	Same w/ wk ↑ limonitic clay tr calcedony vns ↑ argillic clay alt ↓ perv. silicif. WEAK H2O - DRIED OUT HOLE						"				"		<.001		<.10				
225	"	Same w/ perv. mod str argillic clay alt w/ few zones of silicification wk perv. bleaching w/ ↓ chl alt						"				" @ ±2%		<.001		<.10				
230	"	Same w/ wk perv bleaching ↑ perv. argillic clay alt wk FeOx clay						"				"		.001		<.10				
235	"	Same w/ ↑↑ drusy qtz vns w/ local limon clay wk lt green clay, wk bleaching wk-mod perv. silicification wk hairline stwk qtz vns						"				"		.001		.23				
240	"	Same w/ ↑↑ perv. deep sea green alt stratifiede wk silicif. to argillic tr stwk qtz						dk green				" @ 2%		.004		<.10				
245	POOR	Same w/ wk-mod gray clay						"				"		.003		.34				
250																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 6 OF 12

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
250	G	Bud Breccia - fragmental - dep sea green pers argillic alt local frag white clay alt tr sap/white clay wh/gray clay wh'd rusty qtz locally encapsulating sulfides local wk siliceous seams						Deep green				2% diss + vn py		<.001		.18				
255	"	Same						"				"		.002		<.10				
260	"	MISSING SAMPLE						"				"		<.001		<.10				
265	"	Same w/ predom clay alt						"				" @ 1-2%		<.001		<.10				
270	"	Same w/ mod str lt gray clay local wk siliceous seams						"				"		<.001		<.10				
275	"	Same w/ wk local bleaching wb						"				"		<.001		<.10				
280	"	Same w/ wk gray clay						"				"		<.001		<.10				
285	"	Same pers clay alt local wk siliceous seam w/ ↑ drusy qtz vns						"				" @ 2%		.001		<.10				
290	"	Same stratified wk silicification w/ more siliceous interbeds						"				"		<.001		<.10				
295	"	Same w/ ↑ drusy qtz encap sulfide vns + stockwork qtz vns (barren)						"				"		<.001		<.10				
300																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 7 OF 12

	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-	GOOD	fragmental-dk sea green str perv propylitic alt. perv. mod str fracture clay alt clasts predom white clay alt local siliceous strat/bed w/ predom clay alt w/ c drusy encap py VNS						Deep GREEN				1-2% fine diss + VN py + blebs by	+ marcasite	<.001		<.10				
305-	"	same w/ few local bleached frags ie. contamination?						"				"	"	<.001		<.10				
310-	"	same w/ mod str lt gray clay						"				"	"	<.001		<.10				
315-	"	same str perv clay alt						"				" @ ~2%	"	<.001		<.10				
320-		320' w ↑ H2O																		
	"	same lt warty green arg alt w/c sea green + few % clay						"				"		<.001		<.10				
325-	"	same w/ 7-10% visible contam perv. dk sea green						"				"		.002		<.10				
330-	"	same w/ lt green (sage) warty clay alt inner beds						"				"		<.001		<.10				
335-	"	same w/ lt sage green warty clay inner beds						"				"		<.001		<.10				
340-	"	same w/ seams of w/c silicification						"				"		.001		<.10				
345-	"	same w/ ~10% contamination - visible w/ local siliceous zones						"				"		<.001		<.10				
350-																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 8 OF 12

	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
350	G O O D	Deep sea green fragmental w/ lt green wavy clay interbeds pervasive strong argillic alt-clay ✓ wk druzy qtz vns ± sulfides 350-355 ~10% + contamination						Deep green				2%+ diss + VN py + marcasite		.001		<.10				
355	"	same						"				" @ 2-3%		.003		<.10				
360	"	same poss w/ few bleached wkly-mod silicified frag gr tuff bleached						"				"		.004		<.10				
365	"	same w/ 15-20% contamination few bleached frags " ?						"				"		.005		<.10				
370	"	same pervasively lt sage green w/ few bleached frags tuff strong pyro clay alt wk druzy qtz sulfide vns						Lt sage green				" @ ~2%		.002		.24				
375	"	with white clay tuff, pervasively lt sage green, tn gr laminated perv. bleach + strong clay alt ~5% bleached siliceous frags + sulfides 0.3 fine gr tuff fw druzy qtz encap " vns						"				3%+ diss + VN pyrite + marcasite		.004		<.10				
380	"	few bleached siliceous frags wk green fine stalk same @ 375-380 wk druzy qtz encap sulf vns mod white to lt green clay zones of ✓ argillic alt w/ perv bleaching with lt white yellow waxy clay						"				"		.006		<.10				
385	"	same @ 380-385 w/ wk white clay wk ↑ bleaching						medium green				" @ 2-3%		.004		.17				
390	"	same @ 380-385 w/ very strong druzy qtz ± sulfide vns + good fine stockwork qtz vns hydrothermally altered						"				" @ 3%+		.005		<.10				
395	"	Buff to flesh grainy tuff mod perv bleached + clay alt very strong druzy qtz vns w/ local sulfide encap silication fine hairline stockwork ± sulfides local hydrothermal brecciation						Buff to flesh				"		.003		<.10				
400																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 9 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION (fragmental vs. Δia)	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
400	GOOD	Buff to flesh fine grained tuff, mod well perv argillically bleached & clay alt strong drusy qtz vns w/ local sulfide encapsulation locally hydrothermally brecciated w/ local drusy alt poss wk Feox ↳ w/ assoc silicification, wk soft white clay	(Δ)	XK				BUFF TO FLESH				3%+ VN + diss py + marca-site		.006		<.10				
405	"	Same w/ ~ 10-15% + contamination ↓ drusy qtz vns wk ↑ argillicalt	(Δ)	XK				"				"		.013		<.10				
410	"	Same alteration w/ predom fragmental composition ↑ argillicalt ≥ tuffaceous ↓ stkwork & drusy qtz vns wk hint green		XK				"				"	mod marca site	.011		<.10				
415	"	Same @ 410-415 w/ predom fragmental		XK				"				"	"	.03		.18				
420	"	Same - alteration in fragmental w/ wk white waxy clay		XK				"				" @ 3-4%	"	.091		.36				
425	"	Same epiclastic w/ 10-15% + contamination		XK				"				"	"	.041		.18				
430	"	Same mixed fragmental, tuffs w/ perv argillic alt stratified w/ cht & siliceous inner beds local white clay beds locally Δiated ↑ perv. bleaching w/ cht mod stkwk + drusy qtz locally encapsulating sulfides		X K				GRAY BUFF				~3% fine diss py + py + marcasite	vn bleached	.03		.35				
435	"	Same @ 430-435 w/ wk calcite veining		XK Ca				"				"		.049		.27				
440	"	Same @ 430-435 w/ wk calcite veining		XK Ca				flesh				"		.055		.10				
445	"	Brecciated flesh fine grained tuff ↑ perv. silicified hydro Δia good - strong flow banded tuff strong stockwork qtz vns ~10% contamination wk drusy xtal qtz vns wk white waxy clay	(Δ)	XX XK Ca				flesh				" @ 4% plus Ag?	black mineral	.184		1.96				
450																				

* * → Strong Ag

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 10 OF 12

	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
450	GOOD	blow banded Gray Buff to pinkish fine grained tuff wk-mod silicified v. wkly bleached fine hairline stockwork qtz vns ± wh drusy qtz locally encapsulating sulfides locally hydrotherm Δiated w/ wk white clay wk calcite vns		XX XK +++ CA				GRAY BUFF				~4% fine diss + vn py ± moreasite + black Ag mineral		.099		.55				
455	"	same w/ ↑ perv. silicification perv. bleached tr contamination		XX XK +++ Ca				GRAY WHITE				" @ ~3%	↓ Ag mineral	.131		.35				
460	"	same w/ ↑ perv. silicification perv. bleached		XX XK +++ Ca				"				"	"	.283		2.13				
465	"	same pervasively bleached perv. silicified w/ stratification of argillically clay alt beds		XX XK +++ Ca				"				"	"	.325		8.83				
470	"	same @ 465-470 w/ ↑ calcite vns w/ ~5% contamination		XX XK +++ Ca				"				"	"	.206		5.42				
475	"	same wkly perv bleached mod perv. silicified wk FeOx in micro Δia vns to brecciated wk calcite vns		XX XK +++ Ca				"				"	no Ag black mineral present	.069		4.64				
480	"	same w/ wk bleaching in stratification of silicification w/ wk argillic clay alt beds. Δiated to micro Δia vns ± FeOx wk to wkly mod calcite vns		XX XK +Ca				"				"	v. wk black silver mineral	.032		1.10				
485	"	Grainy tuff to tuffaceous breccia tint pink white v. weak perv. silicific perv argillic clay alt strong vuggy drusy qtz ± calcite + sulfide veins tr ○ hairline stockwork qtz wk white clay w/ ~5% + contamination		X XK +++ Ca				PINKISH WHITE				3% VN + diss py ± moreasite	—	.012		<.10				
490	"	same. w/ v. strong drusy qtz + calcite + sulfide veins w/ ↑ calcite ~10% contam. mod str white soft clay		XX XK +++ Ca				"				"		.013		<.10				
495	"	same w/ ↑ perv. argillic clay alt ↑ vein calcite wk white clay ~3% contam.		X XK +++				"				" @ 4%		.012		<.10				
500																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 11 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION (543' SGT)	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
500	GOOD	Lt flesh grainy tuff locally brecciated pervasively sericitized & bleached white inner beds of clay alt tuff mod vuggy drusy qtz + calcite + py vns also solitary calcite vns weak white clay locally						LT. FLESH				3-4% fine diss + vn py		.006		<.10				
505	"	v. weak oxidation 2-3% contaminat						"				"		.014		<.10				
		same w/ wk ↑ drusy qtz-calcite-py vns wk ↑ white clay ~10% contamination																		
510	"	same wk hard white waxy clay pers. vuggy leached textured 512-515' strong fracturing w/ 2-3% contamination						"				"	± mar casite - black pyrite	.025		<.10				
515	"	same w/ ↑↑ drusy vuggy qtz calcite vns + very strong calcite veining & 20% + contamination w/ pervasive vuggy leached texture						"				" @ ~2%	"	.014		.14				
520	"	same @ above + bleaching 521' fault w/ clay - w/ mod str ~ up to 20% + contamination - bleach out into open spacing w/ good specular cluster py strong calcite veining w/ assoc white clay						"				" @ 2-3%	"	.003		<.10				
525	POOR	same - pervasively bleached; clay alt w/ v strong calcite vns (mod str qtz + $CaCO_3$ + white clay vns) ~5-7% contam w/ wk lt green + white clay ination w/ specular cluster py veins						WHITE				" @ 3% +	wk to soft black Ag mineral	.004		<.10				
530	POOR	same - pervasively bleached mod white clay lt hint green strongly clay alt beds w/in v. strong calcite vns + qtz-calcite-clay-py vns mod strong specular cluster pyrite veins (~10% + contamination)						"				" @ 4% ±	wk black Ag mineral	.003		<.10				
535	MODERATE	mod argillic clay + bleach tuff w/ SiO_2 overprint w/ intensly strong calcite veins w/ local assoc sulfides wk qtz + $CaCO_3$ + clay + py vns poss ~3% + contam. wk specular cluster py vns						"				" @ 3-4%		.008		<.10				
540	GOOD	same - argillic bleached + clay alt tuff locally likely silicified w/ weak hint green (smectite?) qtz + $CaCO_3$ + white clay + pyrite vns mod strong calcite veining wk white waxy clay vns						WHITE INTO SAGE GREEN				" @ 2-3%		.003		<.10				
545	"	↳ moving into SGT in last 2' Hard sage green tuff v wk stockwork qtz ~7% contamination						SAGE GREEN				~2% v. fine diss py		.006		<.10				
550																				

LAC MINERALS U.S.A. INC.

LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-27 PAGE 12 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION SGT	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
550	GOOD	fine grained sage green tuff hard trace stockwork qtz, wh calcite veining ~5% contamination ± from bleached zone above SiO2 filling vesicles, poss wk bleach		~X Xk CA P				SAGE GREEN				~2% finely diss PY		.003		<.10				
555	"	same w/ ~5-7% contamination from above wh calcite veining ± pyrite		X Xk Ca P				"				"		.010		<.10				
560	"	same w/ ~7-10% contamination local wk hard white waxy clay		~X CA P				"				" @ 1-2%		.007		<.10				
565	"	same w/ ~4-5% contamination to hard white waxy clay		~X CA P				"				"		.008		<.10				
570	"	same w/ ~2-3%+ contamination wh chl + white waxy clay veins		~X CA P				"				"		.006		<.10				
575	"	same w/ ~3% contam. wk chl + $CaCO_3$ + white waxy clay veins		~X CA P				"				"		.032		<.10				
580		T.D.																		
585																				
590																				
595																				
600																				

NEVADA GSI
GEOCHEMICAL SERVICES, INC.

AUG 21 1989

GEOCHEMICAL ANALYSIS REPORT

August 17, 1989

Kristen Kenner
LAC Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 298
Project: 615411
GSI Number: 5083
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

	Sample I.D.			Au o/t	Ag o/t
1	RE-27	0	5	0.001	<.10
2	RE-27	5	10	0.001	<.10
3	RE-27	10	15	0.002	<.10
4	RE-27	15	20	0.001	<.10
5	RE-27	20	25	0.002	0.12
6	RE-27	25	30	0.001	<.10
7	RE-27	30	35	<.001	<.10
8	RE-27	35	40	<.001	<.10
9	RE-27	40	45	<.001	<.10
10	RE-27	45	50	<.001	0.28
11	RE-27	50	55	0.004	0.11
12	RE-27	55	60	0.001	0.12
13	RE-27	60	65	0.001	<.10
14	RE-27	65	70	<.001	0.13
15	RE-27	70	75	<.001	<.10
16	RE-27	75	80	0.002	0.23
17	RE-27	80	85	0.001	<.10
18	RE-27	85	90	0.001	0.25
19	RE-27	90	95	0.001	<.10
20	RE-27	95	100	0.001	<.10
21	RE-27	100	105	0.001	<.10
22	RE-27	105	110	0.001	<.10
23	RE-27	110	115	0.001	<.10
24	RE-27	115	120	0.001	<.10
25	RE-27	120	125	<.001	<.10
26	RE-27	125	130	0.001	0.37
27	RE-27	130	135	0.001	<.10
28	RE-27	135	140	0.002	<.10
29	RE-27	140	145	0.005	<.10
30	RE-27	145	150	0.005	0.10

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	Sample I.D.		Au o/t	Ag o/t
31	RE-27	150 155	<.001	<.10
32	RE-27	155 160	<.001	<.10
33	RE-27	160 165	0.001	<.10
34	RE-27	165 170	<.001	<.10
35	RE-27	170 175	<.001	<.10
36	RE-27	175 180	<.001	0.15
37	RE-27	180 185	0.001	<.10
38	RE-27	185 190	0.002	0.17
39	RE-27	190 195	<.001	<.10
40	RE-27	195 200	<.001	<.10
41	RE-27	200 205	<.001	<.10
42	RE-27	205 210	<.001	<.10
43	RE-27	210 215	<.001	<.10
44	RE-27	215 220	<.001	<.10
45	RE-27	220 225	<.001	<.10
46	RE-27	225 230	<.001	<.10
47	RE-27	230 235	0.001	<.10
48	RE-27	235 240	0.001	0.23
49	RE-27	240 245	0.004	<.10
50	RE-27	245 250	0.003	0.34
51	RE-27	250 255	<.001	0.18
52	RE-27	255 260	0.002	<.10
53	RE-27	265 270	<.001	<.10
54	RE-27	270 275	<.001	<.10
55	RE-27	275 280	<.001	<.10
56	RE-27	280 285	<.001	<.10
57	RE-27	285 290	<.001	<.10
58	RE-27	290 295	0.001	<.10
59	RE-27	295 300	<.001	<.10
60	RE-27	300 305	<.001	<.10
61	RE-27	305 310	<.001	<.10
62	RE-27	310 315	<.001	<.10
63	RE-27	315 320	<.001	<.10
64	RE-27	320 325	<.001	<.10
65	RE-27	325 330	0.002	<.10
66	RE-27	330 335	<.001	<.10
67	RE-27	335 340	<.001	<.10
68	RE-27	340 345	0.001	<.10
69	RE-27	345 350	<.001	<.10
70	RE-27	350 355	0.001	<.10
71	RE-27	355 360	0.003	<.10
72	RE-27	360 365	0.004	<.10
73	RE-27	365 370	0.005	<.10
74	RE-27	370 375	0.002	0.24
75	RE-27	375 380	0.004	<.10
76	RE-27	380 385	0.006	<.10

	Sample I.D.			Au o/t	Ag o/t
77	RE-27	385	390	0.004	0.17
78	RE-27	465	470	0.325	8.83
79	RE-27	470	475	0.206	5.42
80	RE-27	475	480	0.069	4.64
81	RE-27	480	485	0.032	1.10
82	RE-27	485	490	0.012	<.10
83	RE-27	490	495	0.013	<.10
84	RE-27	495	500	0.012	<.10
85	RE-27	500	505	0.006	<.10
86	RE-27	505	510	0.014	<.10
87	RE-27	510	515	0.025	<.10
88	RE-27	515	520	0.014	0.14
89	RE-27	520	525	0.003	<.10
90	RE-27	525	530	0.004	<.10
91	RE-27	530	535	0.003	<.10
92	RE-27	535	540	0.008	<.10
93	RE-27	540	545	0.003	<.10
94	RE-27	545	550	0.006	<.10
95	RE-27	550	555	0.003	<.10
96	RE-27	555	560	0.010	<.10
97	RE-27	560	565	0.007	<.10
98	RE-27	565	570	0.008	<.10
99	RE-27	570	575	0.006	<.10
100	RE-27	575	580	0.032	<.10
101	RE-28	0	5	0.003	<.10
102	RE-28	5	10	0.002	<.10
103	RE-28	10	15	0.001	<.10
104	RE-28	15	20	0.001	<.10
105	RE-28	20	25	0.001	<.10
106	RE-28	25	30	0.002	<.10
107	RE-28	30	35	0.001	<.10
108	RE-28	35	40	0.002	<.10
109	RE-28	40	45	0.003	0.10
110	RE-28	45	50	0.002	<.10
111	RE-28	50	55	0.002	0.13
112	RE-28	55	60	0.003	<.10
113	RE-28	60	65	0.001	<.10
114	RE-28	65	70	0.001	<.10
115	RE-28	70	75	<.001	0.14
116	RE-28	75	80	<.001	<.10
117	RE-28	80	85	<.001	<.10
118	RE-28	85	90	0.003	<.10
119	RE-28	90	95	0.001	<.10
120	RE-28	95	100	0.005	<.10
121	RE-28	100	105	0.001	<.10
122	RE-28	105	110	0.001	<.10

Sample I.D.				Au o/t	Ag o/t
123	RE-28	110	115	0.003	<.10
124	RE-28	115	120	<.001	<.10
125	RE-28	120	125	<.001	<.10
126	RE-28	125	130	0.002	<.10
127	RE-28	130	135	0.001	<.10
128	RE-28	135	140	0.002	<.10
129	RE-28	140	145	0.003	<.10
130	RE-28	145	150	0.001	<.10
131	RE-28	150	155	0.002	<.10
132	RE-28	155	160	0.001	<.10
133	RE-28	160	165	0.002	<.10
134	RE-28	165	170	0.001	<.10
135	RE-28	170	175	0.001	<.10
136	RE-28	175	180	0.003	0.12
137	RE-28	180	185	<.001	<.10
138	RE-28	185	190	0.007	0.16
139	RE-28	190	195	<.001	<.10
140	RE-28	195	200	<.001	0.13
141	RE-28	200	205	0.002	<.10
142	RE-28	205	210	0.001	<.10
143	RE-28	210	215	<.001	0.10
144	RE-28	215	220	<.001	<.10
145	RE-28	220	225	<.001	<.10
146	RE-28	225	230	<.001	<.10
147	RE-28	230	235	<.001	<.10
148	RE-28	235	240	<.001	<.10
149	RE-28	240	245	0.003	1.26
150	RE-28	245	250	0.061	0.96
151	RE-28	250	255	<.001	<.10
152	RE-28	255	260	<.001	0.17
153	RE-28	260	265	<.001	0.42
154	RE-28	265	270	0.021	0.45
155	RE-28	270	275	0.011	0.63
156	RE-28	275	280	0.003	0.27
157	RE-28	280	285	0.002	0.57
158	RE-28	285	290	0.001	0.57
159	RE-28	290	295	<.001	0.21
160	RE-28	295	300	0.006	0.16
161	RE-28	300	305	0.001	<.10
162	RE-28	305	310	0.002	0.14
163	RE-28	310	315	0.002	<.10
164	RE-28	315	320	0.002	0.12
165	RE-28	320	325	0.002	0.50
166	RE-28	325	330	0.003	0.11
167	RE-28	330	335	0.004	0.29
168	RE-28	335	340	0.003	0.16

Sample I.D.				Au o/t	Ag o/t
169	RE-28	340	345	0.003	0.90
170	RE-28	345	350	0.002	<.10
171	RE-28	350	355	0.002	<.10
172	RE-28	355	360	<.001	<.10
173	RE-28	360	365	0.001	<.10
174	RE-28	365	370	0.003	0.36
175	RE-28	370	375	0.006	0.22
176	RE-28	375	380	0.004	<.10
177	RE-28	380	385	0.005	0.16
178	RE-28	385	390	0.003	0.10
179	RE-28	390	395	0.002	<.10
180	RE-28	395	400	0.003	<.10
181	RE-28	400	405	0.005	0.16
182	RE-28	405	410	0.009	0.15
183	RE-28	410	415	0.010	<.10
184	RE-28	415	420	0.002	0.11
185	RE-28	420	425	0.001	0.23
186	RE-28	425	430	0.006	0.11
187	RE-28	430	435	0.005	0.14
188	RE-28	435	440	0.001	<.10
189	RE-28	440	445	<.001	<.10
190	RE-28	445	450	<.001	<.10
191	RE-28	450	455	<.001	<.10
192	RE-28	455	460	<.001	<.10
193	RE-28	460	465	<.001	<.10
194	RE-28	465	470	<.001	0.14
195	RE-28	470	475	<.001	<.10
196	RE-28	475	480	<.001	0.11
197	RE-28	480	485	<.001	<.10
198	RE-29	0	5	0.002	0.13
199	RE-29	5	10	0.001	0.11
200	RE-29	10	15	0.001	<.10
201	RE-29	15	20	0.001	<.10
202	RE-29	20	25	0.001	<.10
203	RE-29	25	30	0.001	<.10
204	RE-29	30	35	0.002	0.13
205	RE-29	35	40	0.002	0.14
206	RE-29	40	45	0.001	0.15
207	RE-29	45	50	0.001	0.12
208	RE-29	50	55	0.002	0.12
209	RE-29	55	60	0.001	0.19
210	RE-29	60	65	0.001	0.26
211	RE-29	65	70	0.002	0.22
212	RE-29	70	75	0.001	0.11
213	RE-29	75	80	<.001	0.21
214	RE-29	80	85	0.001	<.10

Sample I.D.				Au o/t	Ag o/t
215	RE-29	85	90	<.001	0.13
216	RE-29	90	95	0.002	<.10
217	RE-29	95	100	0.002	<.10
218	RE-29	100	105	0.002	<.10
219	RE-29	105	110	<.001	<.10
220	RE-29	110	115	0.002	0.11
221	RE-29	115	120	0.002	0.14
222	RE-29	120	125	0.001	<.10
223	RE-29	125	130	0.002	0.24
224	RE-29	130	135	0.001	0.17
225	RE-29	135	140	0.001	0.24
226	RE-29	140	145	0.001	0.11
227	RE-29	145	150	0.002	<.10
228	RE-29	150	155	0.002	<.10
229	RE-29	155	160	0.002	<.10
230	RE-29	160	165	0.001	<.10
231	RE-29	165	170	0.003	0.13
232	RE-29	170	175	0.002	0.32
233	RE-29	175	180	0.002	<.10
234	RE-29	180	185	0.002	<.10
235	RE-29	185	190	<.001	<.10
236	RE-29	190	195	<.001	<.10
237	RE-29	195	200	0.001	<.10
238	RE-29	200	205	0.001	<.10
239	RE-29	205	210	0.001	<.10
240	RE-29	210	215	0.003	<.10
241	RE-29	215	220	0.002	<.10
242	RE-29	220	225	0.003	0.18
243	RE-29	225	230	0.002	0.17
244	RE-29	230	235	0.002	0.14
245	RE-29	235	240	0.001	<.10
246	RE-29	240	245	0.002	<.10
247	RE-29	245	250	0.001	<.10
248	RE-29	250	255	0.001	0.19
249	RE-29	255	260	0.004	0.57
250	RE-29	260	265	0.002	0.15
251	RE-29	265	270	0.002	0.38
252	RE-29	270	275	0.003	0.24
253	RE-29	275	280	0.002	0.81
254	RE-29	280	285	0.002	0.68
255	RE-29	285	290	0.003	0.11
256	RE-29	290	295	0.010	<.10
257	RE-29	295	300	0.003	0.13
258	RE-29	300	305	0.002	0.23
259	RE-29	305	310	0.002	<.10
260	RE-29	310	315	0.005	0.10

Sample I.D.			Au o/t	Ag o/t
261	RE-29	315 320	0.003	<.10
262	RE-29	320 325	0.003	<.10
263	RE-29	325 330	0.004	<.10
264	RE-29	330 335	0.004	<.10
265	RE-29	335 340	0.003	0.15
266	RE-29	340 345	0.003	0.11
267	RE-29	345 350	0.002	<.10
268	RE-29	350 355	0.003	0.11
269	RE-29	355 360	0.003	0.13
270	RE-29	360 365	0.006	0.23
271	RE-29	365 370	0.003	0.15
272	RE-29	370 375	0.003	0.17
273	RE-29	375 380	0.004	0.18
274	RE-29	380 385	0.003	<.10
275	RE-29	385 390	0.004	0.17
276	RE-29	390 395	0.005	0.23
277	RE-29	395 400	0.005	<.10
278	RE-29	400 405	0.007	0.12
279	RE-29	405 410	0.007	0.19
280	RE-29	410 415	0.007	0.63
281	RE-29	415 420	0.004	<.10
282	RE-29	420 425	0.002	<.10
283	RE-29	425 430	0.003	<.10
284	RE-29	430 435	0.005	<.10
285	RE-29	435 440	0.001	<.10
286	RE-29	440 445	<.001	<.10
287	RE-29	445 450	<.001	0.18
288	RE-29	450 455	0.002	<.10
289	RE-29	455 460	0.002	0.15
290	RE-29	460 465	0.001	<.10
291	RE-29	465 470	0.001	<.10
292	RE-29	470 475	0.001	<.10
293	RE-29	475 480	<.001	<.10
294	RE-29	480 485	<.001	<.10
295	RE-29	485 490	0.003	<.10
296	RE-29	490 495	<.001	<.10
297	RE-29	495 500	<.001	<.10
298	RE-29	500 505	<.001	<.10

This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

NEVADA GSI GEOCHEMICAL SERVICES, INC.

AUG 09 1989

GEOCHEMICAL ANALYSIS REPORT

August 7, 1989

Mr. Craig Nelsen
LAC Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 15
Project: URBD
GSI Number: 5035
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

	Sample I.D.	Au o/t	Ag o/t
1	SAMPLE: RE-27 390 395	0.005	<.10
2	SAMPLE: RE-27 395 400	0.003	<.10
3	SAMPLE: RE-27 400 405	0.006	<.10
4	SAMPLE: RE-27 405 410	0.013	<.10
5	SAMPLE: RE-27 410 415	0.011	<.10
6	SAMPLE: RE-27 415 420	0.030	0.18
7	SAMPLE: RE-27 420 425	0.091	0.36
8	SAMPLE: RE-27 425 430	0.041	0.18
9	SAMPLE: RE-27 430 435	0.030	0.35
10	SAMPLE: RE-27 435 440	0.049	0.27
11	SAMPLE: RE-27 440 445	0.055	0.10
12	SAMPLE: RE-27 445 450	0.184	1.96
13	SAMPLE: RE-27 450 455	0.099	0.55
14	SAMPLE: RE-27 455 460	0.131	0.35
15	SAMPLE: RE-27 460 465	0.283	2.13

60'c .084
50'c .098
.64

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

1498 Kleppe Lane • Sparks, Nevada 89431 • FAX: 702/359-6605 • 702/359-6600