60001425

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-205C
AUTHOR	K. Kenner; T. Kuhl; R. Donata
DATE OF DOC(S)	1991
MULTI_DIST Y / N? Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Coates Drilling Lac Minerals (USA), Inc; Bondar-Clegg Inc Chemex Labs, Inc
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 723' handwritten notes 28p.

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 5/20/08
Initials Date

DB: mch
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

DRILL LOG RL-205
Rosebud

60001425 4010

6600 1425

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD RC to 380'

HOLE NUMBER RL205C TOTAL DEPTH 722.5 LOGGED BY KLK

Date started 8-8-91

Date completed 8-10-91

Initial bearing

Initial inclination vertical

Elevation 5337.2

Collar coordinates:

N 2203722.0

E 482903.6

Contractor: COATES

Drill Type: universal

Hole Size: HQ

Drilling Conditions:

Footage: Wet / Dry

Comments:

DOWN HOLE SURVEY INFORMATION

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

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

FINE-GRAINED TUFF
LITHIC LAPILLI TUFF

ARGILLIC
XX SILICIFICATION
OX OXIDIZED
XXXXXX DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
P P P PROPYLITIZATION
Ca CALCITE

DRILL HOLE RL-205

Page 1 of 4

LOGGED BY MW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV
	Qal																	
105	CT	x							Crm. to Brn.					Chocolate Tuff Fine Grained Brown to Cream Tuff Porph with Plageoclase Phenocrysts				
10																		
15																		
20		N																
25		N																
30		x							Crm to Tan					T				
35		N x							Tan Brn						.004	.03		
40		N x													<	.03		
45									WH, Crm Orng						<</<	.03/<		
50		NN							Orng Crm					Increasing Clays	<	<		
55		N													<	<		
60		NN							Orng Tan						<	<		
65															<	<		
70		xxxxx							WH to Orng						<	.10		
75		xxxxx							Off WH to Orange Crm						<	.08		
80		xxxx												Abit Clay	<	.10		
85		xxxxx													.020	.11		
90		xxxxx													.018	.09		
95		xxx											.5	Okay Qtz Py Veins — Redox Zone —	.004/.003	.12		
100	CT	xxxxxx							WH-LT Gy				1.5	strongly Silica altered CT	.003	.12		

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DRILL HOLE RL-205

Page 2 of 4

LOGGED BY MW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV
	CT	XXXXXX							Clr to Wh				1.5	CT Strgly Silica Alt w/SS texture and Py Veins and Tr Wh Clay	<	.07		
105		N XXXXX											.5	Increasing inter granular Wh Clay	<	.05		
110		N XXXX							Wh to Lt Gy						<	.07		
115		N XXX											TR		<	<		
120		N XXX													<	<		
125		XXXX											.5		<	<		
130		XXXX													<	<		
135		XXXX												Coarse Diss Py	<	.03		
140		XXXX											.5	Qtz Veins	<	.03		
145		XXXX							Wh to Crm					CT w/ strg Sil alt w/ mod to strg Arg Alt; Diss Py; Py Veins	4/<	.07		
150		N XXX													<	<		
155		XXX													.003	.07		
160		XXX											.5	Diss Coarse Py	.003	.05		
165		XXX												TR Cel; Dk Gy Qtz Py Veins; Diss Py	<	.08		
170		N XXX											TR		<	.09		
175		N XX													.005	.12		
180		N XXX											.5		4/<	.10/.11		
185		N XX							Crm to Wh				1		<	.08		
190		XXX							Wh to Lt				.5		<	.09		
195	CT	N XXX							Wh to Lt Gy				1.5		4/<	.10		
200																		

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XXXXXX DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
P P P PROPYLITIZATION
Ca CALCITE

DRILL HOLE RL-205C

Page 3 of 4

LOGGED BY MW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV
	CT	N XXX							WH to CrM				2	CT fine Grained tuff w/ Stng Sil Stng Arg Alt w/ Granular Texture DKGY Qtz Py Veins TR Cebdonte	.003	.11		
205		XXX											1.5		.003	.12		
210		XXX							WH to LTGrn				1	Diss Coarse Py WK Cel	<	.11		
215		XXX											1.5		<	.10		
220		XXX							WH w/ LTGrn + Brn				.5		<	.05		
225		N XXX											1	Qtz Py Veins	.005	.10		
230		XXXX											1.5	TR Cel	.005	.12		
235		XXX											1		.006	.11		
240		XXX											1.5		.003	.09		
245		N XX							WH to CrM						.019/.020	.10		
250		N XX							LTGY				1		.018	.10		
255		N XXX											2	TR Cel	.004	.10		
260		XXXX							WH LTBrn LTGrn						.004	.08		
265		XXXX X											.5		.009	.13		
270	XX	XXXX							Clr, WH CrM LTGrn				1	TR Qtz Veins	.004	.13		
275		XXX											2	Py Veins	.054	.15		
280		XXX											1.5		.027	.12		
285		XXX											1		.005	.18		
290	▽	XXXX												DKGY Qtz Py Veins Qxt?	.006	.11		
295	▽	XXX													.014/.008	.14		
300																		

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ROSEBUD PROJECT

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LITHIC LAPILLI TUFF

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OX OXIDIZED
XXXXXX DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
P P P PROPYLITIZATION
Ca CALCITE

DRILL HOLE RL-205

Page 4 of 4

LOGGED BY MW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV
		XXXX							Wh to Crm				5	CT fine Grained Tuff w/ Stag Arg + Silica Alt; Dk Gy Qtz Py Veins; Wh Clay	.010/.016	.17/.18		
305		XXXX							Wh LTGrn Crm				4	TR Cel	.009	.15		
310		XXXXY											3	Diss Coarse Py	.005	.12		
315		XXXXX											4		.010	.16		
320		XXXXXX							Wh Brn LTGrn				2		.010	.17		
325		XXXXX							Wh LTGrn TR Brn						.008	.16		
330		XXXXX							Wh LTGrn						.013	.20		
335		XXXY							Wh LTGrn Tan				2.5	Wk Cel	.022	.18		
340		XXX											2	Py Veins	.079/.117	.16		
345		XXXXX											2.0		.016	.16		
350		XXXXX											2.0		.011/.017	.15		
355		XXXX												Qtz Py Veins	.012	.20		
360		XXXXX											5	TR Cel	.017	.20		
365		XXXXX											4		.015	.15		
370		XXXXX											5	Wk Cel	.011	.15		
375		XXY							LTGrn Tan				2	Diss Coarse Py	.051/.049	.13		
380														TOTAL RC				
85																		
90																		
95																		
00																		

HOLE # RL-205C LOGGED BY KLK DATE 9-91 PAGE 1 OF 5

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	COLOR
380							
	96			2-3% diss +VN py± VN marcasite	CT	Mbl W~ tr-w celad	med grass green
	95						
390		20°					
	97	68 qtz clay py + marcasite VNS					buff + grass green
400							
	96		90°				
410				3%+ diss +VN py+ VN marcasite		M-S bl W-M ~ local @ stkwk	lt. gray buff
	96						
420		0°	65° Δ VN				
	100	90° qtz py clay VNS					
430						Mbl W-M ~ w celad	buff flesh + green
	102			2-3% @ ↑			
440				3-4% @ above			

DESCRIPTION

380 - 562.3 Chocolate FGT

CORE BEGAN @ 380'

380-562.3 Chocolate Fine GRAINED TUFF

slight grainy texture w/ very weak 1-2% clay alt phenos intermittently which are ±2mm wide, pervasively bleached & w/-m argillic alt. predom weak veining w/ few zones of strong druzy qtz stkwk. 2 phases of veining are prominent which locally crosscut one another. They consist of 1) druzy to saeroidal qtz encapsulating pyrite w/ local clay (kaolinite - white) fill. Locally expessed @ strong stockworking 2) Kaolinite - clay - white rich w/ local oxidized golden orange clay & fine marcasite crystals

On the average ~ 3-8 uno/ft w/ local stv zones described independently

402-422 zone of strong druzy qtz stockwork - open spaced w/ white kaolinite + pyrite + poss local replaced marcasite. Averaging ~ 20-25 uno/ft.

* @ 425' specimen of orange clays taken for x-ray identification

422-444 druzy - vuggy qtz uno decrease & white + golden orange clay + marcasite veins increase predom. sub parelle to CA oxidation weakly permeates into the wall rock clay uno average ~ 5-7 uno/ft. Local w/ carmy green chalcedonic stockwork especially 426-427 fine qtz sulfide uno ~ 5-10/ft

CT is intermittently tectonically brecciated from 413.5-523 w/ poss local flo banding - relict?

ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
380-384				<	.07
384-388				<	.08
388-393				.002	.05
393-398				.003	.10
398-403				.004	.08
403-408				.004	.05
408-413				.002	.06
413-418				.002	.06
418-423				.006	.07
423-428				.002 / <	.06 / .04
428-433				<	.07
433-438				.016 / .017 / .016	.12

'OLE # RL-205C LOGGED BY KLK DATE 9-91 PAGE 2 OF 5

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	COLOR
450	96	0° / 80° qtz clay sulf vns stkwk	37° Δ VN	2% diss + VN py + marca site; 4% diss + VN py + marca		W-M bl W-M hint green locally	buff w/ hint green w/k local flesh to mustard yellow grn
460	100		63° Δ VN	2-3% diss + VN py + VN marca site			
470	101						
480	101						
490	100		60° Δ VN				
500	96		Δ VN / 10°				
510	100						

DESCRIPTION

380 - 562.3 CT

444-458 pick up fairly strong lt green "duck butter" clay veins, locally associated w/ qtz sulfide veins, dbvns ≤2mm; average ~ 5-7 vns/ft. Inter

452-453 w/ silicified vein breccia; stkwk qtz vns - drusy vuggy w/ clay fill

450 - 452 local vein/brecciation w/ SiO2 + py + clay matrix

458-508 pervasively lr green; intermittently mottled by burgundy-red org. oxide filling interstices of wall rock, locally speckled w/ chlorite? alt phenos; fine replaced feldspar blebs ± 1mm. veining is moderate throughout composed of 3 predom phases: 1) fine red amber brown chalcedony veins locally encapsulated by drusy qtz py veins up to 5 mm wide, locally expressed as very fine hairline stockwork this veining is intermittent

2) fine translucent hairline qtz stockwork - uncountable

3) drusy qtz encapsulated white kaolinite + pyrite; local marcasite veins expressed as dense stkwork locally, may be filled w/ some zeolites very weak local green orange clays in vns. On the average ~ 5-10 vns/ft

508 - 517 mottled dk army green, very finely speckled w/ poss. chl? replaced phenos. weakly finely veined w/ vns ≤1mm of drusy qtz encapsulated w/ pyrite ± marcasite + local white kaolinite averages ~ 2-4 vns/ft

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
438-443				<	.06
443-448				<	.07
448-453				.003	.10
453-458				<	.08
458-463				.008	.07
463-468				.004	.08
468-473				.010	.12
473-478				.006/.014	.08
478-483				.005	.09
483-488				.007	.07/.07
488-493				.003	.07
493-498				.003	.08
498-503				.002	.09
503-508				.004	.10

HOLE # RL-205C LOGGED BY KLK DATE 9-91 PAGE 3 OF 5

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	COLOR
520	100	10°, 50° qtz clay sulf vns		2% diss tvn py + marcasite		W-M bl W-M	buff w/ local flesh hint local green
530	100	90° stkwk vns		3-4% diss + vn py + marcasite + Ag mineral or Cu oxide		M bl w/ local str bl clasts m-s stockwork xxx m-s thru-out	buff wk lt brwn golden org oxide clasts
	98			2-3% @ above			
540	101	55° OR 10° qtz sulf vns	65° FAULT	lt 1% diss + vn py		M bl SXXX M celad	Med GRN
		GOUGE				M-S bl S W celad	Lt grn local mustard
550	101	60° clay stringers	58°	2-3% diss + vn py + short bladed sulf.		M bl W-M W-M XX m-s celad	mottled green & brwn
				1-2% diss + vn py.		M bl M-S W celad	Lt sage w/ red flecks
560	87	90° stkwk	65°	2-3% diss + vn py + stringers		M-S bl SXXX W celad	GRY ORG BRWN GRN
570	100	60° fine qtz clay sulf veinlets <1mm		≤1% diss + vn py		W-M bl W W celad	Lt yellow grn
							sage grn
580	98						

SRF

380-562.3 CT EP1-
SRF 521.2-562.3 (INFLUENCE) PRIMARY SRF: 538.6-562.3
562.3-595 DT

517-523 strong increase in chalcedonic SiO_2 + white kaolinite stkwork w/ local oxidized clays, local in breccia & riddled w/ fine qtz-py hairline stockwork

523-538.85 pervasively brecciated FGT, clasts are bleached & clay alt. & speckled w/ fine preferential clay alt feldspar. Δ clasts w/ m-s argillic alt locally eaten out & w/ depth become oxidized to golden orange from 528-535 matrix is tuffaceous - argillically alt buff w/ local brownish color all this is overprinted w/ moderate to intense qtz stockwork - locally open spaced to filled w/ SiO_2 + clay mix + local pods of clay + sericite intermittently clays are oxidized to golden orange. Intermittent vein Δ throughout w/ str. SiO_2 matrix holding clay alt + bl clasts & held together @ a web thus incountable

531.5-538.85 stockwork qtz-clay-sulfides decrease
533-534 may contain Ag mineral

538.85-544 intensely silicified fault breccia pervasively green poss. is the "EP1" probably heterolithic lithics vs Δ clasts are ≤3mm wide weak-locally mod blue gray and lt green chalcedonic veining ~1vn/ft. 3-4 stages Δ 542.2-543 massive buff to gray white SiO_2 ± clay mix vein

clasts are rounded to subangular predom green clasts few black shale frags

2 phases veining
1st) chalcedony vns
2) ↑ temp SiO_2 + clay ± sulf shot thru @ fine stkwk

539.65-540.65 flesh color fault breccia w/ chalced grn vns w/ rimmed assoc. white clay w/ blk earthy sulfides

ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
508-513				.003	.09 / .11
513-518				.004	.10
518-523				.005	.11
523-528				.004	.11
528-533				.006 / .002	.10
533-536				.008	.12
536-538.85				.004	.13
538.85-544				<	.08
544-547				.002	.10
547-551				.015	.09
551-554				.005	.61
554-558				.002	.18
558-562.3				<	.08
562.3-568				.010 / .010	.44
568-573				.008 / .003	2.53
573-578				<	<

'OLE # RL-205C LOGGED BY KUK DATE 9-91 PAGE 4 OF 5

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	COLOR
590	102	60° qtz clay stringers		<1% diss tun py		lw bl lw ~ lw clad	lt gray grn
	100				50°		
600	99	clay sulf wvs 0°		±3% diss tbock shot tun py + wk un marcasite + local chal copy.		w-m w bl ~ poss wk X	LT. GRY
610	99	60					
620	100	0° 90° fine qtz stkwk					
630	98						
640	100						
650							

DESCRIPTION

562.3 - 595 DT
595 - 695.9 TMb

544 - 551 Clay cemented fault breccia - shear zone - lt sage green w/ local flecks of emerald green celadonite? fair local gray sulfide rich clay gouge zones. Moderate white clay (kaolinite stringers w/ no preferred orientation w/ local SiO2 assoc.

551 - 558.1 lt green fine grained tuff bleached intermittently brecciated ±2 stg Δ w/ weak SiO2 + clay stringers weakly to mod silicified Δ riddled w/ short black sulf. (~2-3%) local subrounded gray to tan clasts
SSS - 556.4 ↓ XX w/ ↑ str. argillization

551.5 - 553 looks like post silicif. shear zone w/ subparallel white clay + chalced. veins w/ pods of py ±Ag mineral. locally still argillized

558.1 - 562.3 Intensely brecciated silicified fault Δ upper contact @ 58 to CA. ; lower contact ~ 65° to CA.
558.1 - 560 amber brown angular to subrounded clasts w/ gray to wk green chalcedonic matrix MASSI SiO2 flooding 560 - 562.3 coarse Δ up to 1½" clasts w/ 3-7 mm clast matrix, clasts are more rounded ? pervasively translucent green to gray to off white more clast supported w/ white clay + SiO2 matrix v. strong pervasive silicification local pods of stibnite w/in matrix + local dissem py.

562.3 - 595 Dozer Tuff -
lt. green to green gray fine grained, densely welded tuff. locally brecciated, where Δ clasts are gray w/ lt green tuffaceous matrix ? whly-m silicif. weak perv. bleaching, weak SiO2 veinlets ± py as fine hairline stockwork wk local clay veinlets local golden oxides selvage ~ 1/4" rimming veinlets of sulfides
582 - 586 prominently brecciated tuffaceous matrix supported w/ gray clasts riddled w/ fine qtz hairline stockwork w/ local crackle Δ texture

ASSAYS					
Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
578-583				<	<
583-588					4/<
588-593					<
593-598					<
598-603					.03
603-608					.07
608-613				.009 .014 # .009	.07
613-618				<	.05
618-623				4/<	.05
623-628				.007	.08
628-633				.010	.09
633-638				.023	.09
638-643				<	.04
643-648				.005	.07

'OLE # RL-205C LOGGED BY KLK DATE 9-91 PAGE 5 OF 5

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	COLOR
	95	0-90° stk-wk; 0-60° clay sulf vns		±3% @ above		mbl w-m poss x	LT GRY
660	95			2-3% @ above w/ local bronze color metall probs chalcopyrite		Wbl vw poss x touch smectite	LT gry sage grn
670	99	50° fine clay qtz sulf vns					
680	100						
690	102						
700	104	50° clay sulf ±qtz vns	10°/Δ vn	~2% @ above	±47° DT	Mbl w-m x w smectite	LT sage grn buff
710	97	90° fine stkwk	35°				
722.5							

DESCRIPTION

695.9-722.5 DT

595-695.9 TMb

Light gray white fine grained, densely welded porphyritic tuff w/ ~ 2-3% replaced 2-3mm feldspar phenos with white clay ± pyrite; locally pure pyrite. Intermittent 'blebs' of buckshot pyrite up to 1½" wide w-m perv. bleaching moderate veining throughout w/ chalcopy hairline to 1-2mm pyrite ± SiO_2 vns + marcasite vns predom subparelle to CA. ~ 4-10 vns/ft on average

603-613 prominent sub ll veining w/ druzy qtz lining w/ kaolinite + marcasite fill which has probably oxidized w/ exposure

613-624 sulfide replaced phenos w/ ¼" oxide selvages

629-638 w/ ↑ buckshot pyrite, ↑ fine hairline sulfide ± clay veinlets sub ll

635-638 w/ fine crackle brecciation ll to fine vnlets w/ assoc ↑ argillic alt w/ few pods marcasite

658.5-667 more gray hue to rock probably w/ perv. silicification decrease in veining. the few vns present are ±1mm w/ SiO_2 + bronze colored metallic (chalco?) + local kaolin + marcasite

658-663 w/ prominent calcite vns up to ¼" wide - pure white w/ assoc kaolinite + pyrite + green waxy clay

695.9-722.5 DOZER TUFF - Lt green perv. bleached FGT locally crackle to tectonically brecciated, shot thru w/ fine qtz ± py vnslets weak fine stringers; vnlets ±1mm of kaolinite + chalcopyrite ± SiO_2 w/ local amber brown chalcedony. Riddled w/ hairline stkwork - uncountable ±1mm veins @ describ above average ~ 3-7 vns/ft

Key to mineralization

* 699-707 vein brecciated to pervasively Δ w/ bleach clasts riddled w/ fine stkwk qtz ± py vns + green duck butter clay vns. matrix is SiO_2 rich w/ micro Δ matrix w/ chalcopy + py + shiny gray metallic in matrix clasts are w-m argillized

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
648-653				.010	.07
653-658				.016	.10
658-663				.012	.07
663-668				.058 / .057 / .054	.16
668-673				4/<	.02 / .03
673-678				<	<
678-683				<	.04
683-688				<	.03
688-693				.003	.07
693-698				.005	.06
698-703				.022	.07
703-708				.044	.09
708-713				.002	.03
713-718				<	.02
718-722.5				.003	<

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: DOZER LOGGED BY: SAS

HOLE NO.: RL-205C DIP: Vertical CORE SIZE: HQ DATE: 8-12-91

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
380	385	5'	5.3	5.0	4	106	100	0.8	15-60°	VN, ±VG/TH-OP, FD QTZ, CLY/PL-R
385	390	5'	4.1	3.9	3	82	78	0.7	25-55°	VN, VG/TH-OP, FD/QTZ, CLY/R
390	395	5'	4.9	4.9	2	98	98	0.8	10-50°	VN/TH, FD/CLY/W
					2				30-75°	VN, VG/TH-OP, FD/QTZ, CLY/R
395	400	5'	4.6	4.6	3	92	92	0.7	0-30°	VN/TH, FD/CLY/W
400	405	5'	5.05	4.6	6	101	92	1.2	35-85°	VN, ±VG/TH-OP, FD/QTZ, ±CLY/R
405	410	5'	4.5	3.65	6	90	73	1.3	55-80°	VN, VG/TH-OP, FD/QTZ, ±CLY/R Note: Clay Gouge @ 403'
										Note: 407.5'-415' vuggy, W/QTZ
410	415	5'	4.8	3.75	10	96	75	2.1	0-85°	VN, VG/TH-OP, FD/QTZ, CLY/R
415	420	5'	4.5	4.25	5	90	85	1.1	0-50°	VN, VG/TH-OP, FD/QTZ, CLY/PL-R
420	425	5'	5.05	3.9		101	78	1.8		Note: Small clay gouges at 420' and 423'
					9				40-70°	VN, ±VG/TH, FD/CLY, ±QTZ/W-R
425	430	5'	4.7	4.7	6	94	94	1.3	15-55°	VN, ±VG/TH, FD/CLY, ±QTZ/W-R
430	435	5'	5.0	4.55	5	100	91	1.0	25-70°	VN/TH, FD/CLY/W-R
435	440	5'	4.9	4.9	6	98	98	1.2	40-55°	VN/TH, FD/CLY/R
440	445	5'	4.9	4.7	7	98	94	1.4	15-65°	VN/TH, FD/CLY/W-R
445	450	5'	4.35	4.35	2	87	87	0.9	40-50°	VN/TH, FD/CLY/W-R
					2				0-65°	VN, ±VG/TH-OP, FD/QTZ, CLY/W-R
450	455	5'	5.1	4.4	1	102	88	0.8	0-5°	VN/TH, FD/CLY/W
					3				0-90°	VN, VG/TH-OP, FD/QTZ, CLY/R
455	460	5'	4.9	4.4	6	98	88	1.2	40-65°	VN/TH, FD/CLY/R
460	465	5'	5.0	5.0	5	100	100	1.0	40-70°	VN, ±VG/TH, FD/CLY, ±QTZ/W-R
465	470	5'	4.6	3.9	7	92	78	1.5	15-60°	VN, ±VG/TH-OP, FD/CLY, ±QTZ/R
470	475	5'	4.95	4.65	4	99	93	0.8	25-60°	VN, ±VG/TH-OP, FD/CLY, QTZ/R
475	480	5'	4.9	4.7	4	98	94	0.8	40-55°	VN/TH, FD/QTZ, ±CLY, PY/R
480	485	5'	4.85	4.65	4	97	93	0.8	10-50°	VN, ±VG/TH, FD/QTZ, CLY, ±PY/R
485	490	5'	4.8	4.8	3	96	96	0.6	0-85°	VN, ±VG/TH, FD/QTZ, CLY/R
490	495	5'	5.1	4.75	6	102	95	1.2	55-75°	VN, ±VG/TH, FD/CLY, ±QTZ/R
495	500	5'	4.5	4.5	2	90	90	0.4	65-80°	VN/TH, FD/CLY/W
500	505	5'	5.0	4.8	4	100	96	0.8	10-75°	VN, ±VG/TH, FD/CLY, ±QTZ/W-R
505	510	5'	5.0	5.0	2	100	100	0.4	40-60°	VN/TH, FD/CLY/W

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: Dozer LOGGED BY: SAS

HOLE NO.: RL-205C DIP: vertical CORE SIZE: HQ DATE: 8-12-91

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
510	515	5'	5.0	5.0	5	100	100	1.0	15-50°	VN, ±VG/TH,FD/CLY, ±QTZ/W-R
515	520	5'	5.05	5.05	3	101	101	0.6	60-85°	VN/TH, FD/CLY, QTZ/R
520	525	5'	5.0	5.0	3	100	100	0.6	40-45°	VN, ±VG/TH-OP, FD/CLY, ±QTZ/W-R
525	530	5'	4.9	4.9	4	98	98	0.8	45-60°	VN/TH, FD/CLY/R
530	535	5'	5.0	4.5	5	100	90	1.0	60-70°	VN/TH, FD/CLY/R
535	540	5'	5.1	4.95	4	102	99	0.8	20-65°	VN, ±VG/TH-OP, FD/CLY, ±QTZ/R
540	544	4'	3.85	3.85	5	96	96	1.3	45-60°	VN, ±VG/TH, FD/CLY, ±QTZ/W-R
544	551	7'	6.9			99				Note: 544'-551' clay-gouged zone.
551	555	4'	3.8	3.8	3	95	95	0.8	40-70°	VN, ±VG/TH-OP, FD/CLY, ±QTZ/R
555	560	5'	4.9	4.45	5	98	89	1.0	45-60°	VN/TH-OP, FD/CLY, ±QTZ/R
560	565	5'	4.7	4.35	6	94	87	1.3	10-65°	VN/TH, FD/CLY, ±PY/PL-W
565	570	5'	5.0	4.3	10	100	86	2.0	5-70°	VN/TH, FD/CLY, ±PY/PL-R
570	575	5'	4.95	4.4	8	99	88	1.6	15-75°	VN/TH, FD/CLY/R
575	580	5'	4.9	3.8	9	98	76	1.8	15-80°	VN/TH, FD/CLY, ±PY/PL-R
580	585	5'	4.95	4.05	11	99	81	2.2	0-75	VN/TH, FD/CLY, ±PY/R
585	590	5'	4.8	2.65	13	96	53	2.7	0-65°	VN/TH, FD/CLY, ±PY/R Note: 585'-586' Broken rubble
590	595	5'	5.1	4.0	8	102	80	1.6	0-60°	VN/TH, FD/CLY/R
595	600	5'	4.55	3.4	11	91	68	2.4	30-60°	VN/TH, FD/CLY, ±PY/PL
600	605	5'	5.0	3.6	12	100	72	2.4	0-80°	VN/TH, FD/CLY, ±PY/PL-R
										Note 603.5'-604.5' Broken rubble.
605	610	5'	4.6	3.8	10	92	76	2.2	0-75°	VN/TH, FD/CLY, ±PY/R
610	615	5'	4.9	3.9	9	98	78	1.8	0-90°	VN/TH, FD/CLY, ±QTZ/W-R
615	620	5'	4.85	4.55	3	97	91	0.6	30-70°	VN/TH, FD/CLY/R
620	625	5'	5.1	5.1	4	102	102	0.8	30-55°	VN/TH, FD/CLY/PL-R
625	630	5'	4.95	4.95	3	99	99	0.6	0-35°	VN/TH, FD/CLY, ±PY/PL-W
630	635	5'	4.95	4.4	6	99	88	1.2	35-85°	VN/TH, FD/CLY, ±PY/W-R
635	640	5'	4.8	4.8	3	96	96	0.6	25-70°	VN/TH, FD/CLY/PL
640	645	5'	4.95	4.95	2	99	99	0.4	55-65°	VN/TH/PL-W
645	650	5'	4.8	4.65	3	96	93	0.6	0-30°	VN/TH, FD/CLY/PL-W
650	655	5'	5.0	5.0	4	100	100	0.8	25-50°	VN/TH, FD/CLY/R
655	660	5'	5.0	5.0	5	100	100	1.0	15-50°	VN/TH, FD/CLY/R
660	665	5'	4.75	4.75	6	95	95	1.3	35-55°	VN/TH, FD/CLY/R

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: Dozer LOGGED BY: SAS

HOLE NO.: RL-205 C DIP: Vertical CORE SIZE: HQ DATE: 8-13-91

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
665	670	5'	4.4	4.15	4	88	83	0.9	25-45°	VN/TH, FD/CLY, ±PY/PL-W
670	675	5'	5.0	5.0	3	100	100	0.6	30-50°	VN/TH, FD/CLY, PY/PL, W-R
675	680	5'	5.0	4.5	5	100	90	1.0	20-70°	VN/TH, FD/CLY/PY/W-R
680	685	5'	5.05	5.05	2	101	101	0.4	50-55°	VN/TH, FD/CLY, ±PY/PL-R
685	690	5'	4.95	4.75	5	99	95	1.0	30-60°	VN/TH, FD/CLY, ±PY/PL, W-R
690	695	5'	5.0	4.9	5	100	98	1.0	40-50°	VN/TH, FD/CLY, ±PY/PL, W
695	700	5'	5.25	5.05	4	105	101	0.8	10-60°	VN/TH, FD/CLY/W-R
700	705	5'	5.05	5.05	3	101	101	0.6	20-70°	VN, ±VG/TH-OP, FD/QTZ, CLY, PY/R
705	710	5'	4.95	4.95	2	99	99	0.4	25-35°	VN/TH, FD/CLY, PY/
710	715	5'	5.0	5.0	3	100	100	0.6	60-75°	VN/TH, FD/CLY, ±PY/R
715	722.5	7.5'	7.6	7.6	1	101	101	0.1	60°	VN/TH, FD/CLY, PY/R
T.D. 722.5'										

RL205C

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

BONDAR-CLEGG

Au only

Geochemical Lab Report

AUG 28 1991

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R91-11692.4 (PARTIAL)

REFERENCE INFO: RL 205C 30-385

CLIENT: LAC MINERALS (USA) INC.
PROJECT: ROSEBUD

SUBMITTED BY: KENNER
DATE PRINTED: 23-AUG-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	73	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	12	0.002 OPT		Fire Assay
3	AU Dup Gold Duplicate	1	0.002 OPT		Fire Assay

RESULTS TO FOLLOW FOR: AG DUP Ag

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
Z OTHER DRILL TYPES	70	2 -150	70	CRUSH,PULVERIZE -150	70
P PREPARED PULP	3	4 AS REC'D	3	AS RECEIVED, NO SP	3
				DRYING/SAMPLE	101

NOTES: # indicates ERRATIC RESULTS

REMARKS: #ERRATIC RESULTS
K GAMMON

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MS. KRISTIN KENNER

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Richard L Dunlap

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

DATE PRINTED: 23-AUG-91

REPORT: R91-11692.4 (PARTIAL)

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
Z2 RL205C 30 35		0.004		
Z2 RL205C 35 40		<0.002		
Z2 RL205C 40 45		<0.002	<0.002	
Z2 RL205C 45 50		<0.002		
Z2 RL205C 50 55		<0.002		
Z2 RL205C 55 60		<0.002		
Z2 RL205C 60 65		<0.002		
Z2 RL205C 65 70		<0.002		
Z2 RL205C 70 75		<0.002		
Z2 RL205C 75 80		<0.002		
Z2 RL205C 80 85		0.020		
Z2 RL205C 85 90		0.018		
Z2 RL205C 90 95		0.004	0.003	
Z2 RL205C 95 100		0.003		
Z2 RL205C 100 105		<0.002		
Z2 RL205C 105 110		<0.002		
Z2 RL205C 110 115		<0.002		
Z2 RL205C 115 120		<0.002		
Z2 RL205C 120 125		<0.002		
Z2 RL205C 125 130		<0.002		
P4 BA 127		0.041	0.044	
Z2 RL205C 130 135		<0.002		
Z2 RL205C 135 140		<0.002		
Z2 RL205C 140 145		<0.002		
Z2 RL205C 145 150		<0.002	<0.002	
Z2 RL205C 150 155		<0.002		
Z2 RL205C 155 160		0.003		
Z2 RL205C 160 165		0.003		
Z2 RL205C 165 170		<0.002		
Z2 RL205C 170 175		<0.002		
Z2 RL205C 175 180		0.005		
Z2 RL205C 180 185		<0.002	<0.002	
Z2 RL205C 185 190		<0.002		
Z2 RL205C 190 195		<0.002		
Z2 RL205C 195 200		<0.002	<0.002	
Z2 RL205C 200 205		0.003		
Z2 RL205C 205 210		0.003		
Z2 RL205C 210 215		<0.002		
Z2 RL205C 215 220		<0.002		
Z2 RL205C 220 225		<0.002		

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
Z2 RL205C 225 230		0.005		
P4 BA 128		0.096		
Z2 RL205C 230 235		0.005		
Z2 RL205C 235 240		0.006		
Z2 RL205C 240 245		0.003		
Z2 RL205C 245 250		0.019	0.020	
Z2 RL205C 250 255		0.018		
Z2 RL205C 255 260		0.004		
Z2 RL205C 260 265		0.004		
Z2 RL205C 265 270		0.009		
Z2 RL205C 270 275		0.004		
Z2 RL205C 275 280		0.054		
Z2 RL205C 280 285		0.027		
Z2 RL205C 285 290		0.005		
Z2 RL205C 290 295		0.006		
Z2 RL205C 295 300		0.014	0.008	
Z2 RL205C 300 305		0.010	0.016	
Z2 RL205C 305 310		0.009		
Z2 RL205C 310 315		0.005		
Z2 RL205C 315 320		0.010		
Z2 RL205C 320 325		0.010		
Z2 RL205C 325 330		0.008		
P4 BA 129		0.095		
Z2 RL205C 330 335		0.013		
Z2 RL205C 335 340		0.022		
Z2 RL205C 340 345		0.195#	0.079	0.117
Z2 RL205C 345 350		0.016		
Z2 RL205C 350 355		0.011	0.011	
Z2 RL205C 355 360		0.012		
Z2 RL205C 360 365		0.017		
Z2 RL205C 365 370		0.015		
Z2 RL205C 370 375		0.011		
Z2 RL205C 375 380		0.051	0.049	

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

DATE PRINTED: 23-AUG-91

REPORT: R91-11692.4 (PARTIAL)

PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
AU ASSAY STD		0.151	-	-
Number of Analyses		1	-	-
Mean Value		0.1510	-	-
Standard Deviation		-	-	-
Accepted Value		0.150	-	-
ANALYTICAL BLANK		<0.002	-	-
ANALYTICAL BLANK		<0.002	-	-
Number of Analyses		2	-	-
Mean Value		0.0010	-	-
Standard Deviation		0.00000	-	-
Accepted Value		0.002	-	-
Number of Analyses		-	-	-
Mean Value		-	-	-
Standard Deviation		-	-	-
Accepted Value		-	-	-
Number of Analyses		-	-	-
Mean Value		-	-	-
Standard Deviation		-	-	-
Accepted Value		-	-	-
AU PULP STD		0.204	-	-
Number of Analyses		1	-	-
Mean Value		0.2040	-	-
Standard Deviation		-	-	-
Accepted Value		0.184	-	-

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Geochemical Lab Report

DATE PRINTED: 23-AUG-91

REPORT: R91-11692.4 (PARTIAL)

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
RL205C 40 45		<0.002	<0.002						
Duplicate		<0.002							
RL205C 90 95		0.004	0.003						
Duplicate		0.003							
RL205C 145 150		<0.002	<0.002						
Duplicate		<0.002							
RL205C 180 185		<0.002	<0.002						
Prep Duplicate		<0.002							
RL205C 195 200		<0.002	<0.002						
Duplicate		<0.002							
RL205C 245 250		0.019	0.020						
Duplicate		0.020							
RL205C 295 300		0.014	0.008						
Duplicate		0.008							
RL205C 300 305		0.010	0.016						
Prep Duplicate		0.016							
RL205C 350 355		0.011	0.011						
Duplicate		0.011							

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RL-205C
Au Ag

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R91-11692.4 (COMPLETE)

REFERENCE INFO: RL 205C 301-385

CLIENT: IAC MINERALS (USA) INC.
PROJECT: ROSEBUD

SUBMITTED BY: KENNER
DATE PRINTED: 29-AUG-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	73	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	12	0.002 OPT		Fire Assay
3	AG DUP AG DUPLICATE	4	0.02 OPT		Fire Assay
4	Ag Silver	73	0.02 OPT	MULT ACID TOT DIG	Atomic Absorption
5	AU Dup Gold Duplicate	1	0.002 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
Z OTHER DRILL TYPES	70	2 -150	70	CRUSH,PULVERIZE -150	70
P PREPARED PULP	3	4 AS REC'D	3	AS RECEIVED, NO SP	3
				DRYING/SAMPLE	101

NOTES: # indicates ERRATIC RESULTS

REMARKS: #ERRATIC RESULTS
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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

DATE PRINTED: 29-AUG-91

REPORT: R91-11692.4 (COMPLETE)

PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
AU ASSAY STD		0.151	-	-	-	-
Number of Analyses		1	-	-	-	-
Mean Value		0.1510	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.150	-	-	-	-
ANALYTICAL BLANK		<0.002	-	-	-	-
ANALYTICAL BLANK		<0.002	-	-	-	-
Number of Analyses		2	-	-	-	-
Mean Value		0.0010	-	-	-	-
Standard Deviation		0.00000	-	-	-	-
Accepted Value		0.002	-	-	-	-
GEO TRACE STD1(1989)		-	-	-	1.06	-
GEO TRACE STD1(1989)		-	-	-	0.99	-
Number of Analyses		-	-	-	2	-
Mean Value		-	-	-	1.025	-
Standard Deviation		-	-	-	0.0543	-
Accepted Value		-	-	-	1.05	-
AG ASSAY		-	-	-	3.05	-
AG ASSAY		-	-	-	3.20	-
Number of Analyses		-	-	-	2	-
Mean Value		-	-	-	3.123	-
Standard Deviation		-	-	-	0.1083	-
Accepted Value		-	-	-	3.03	-
AU PULP STD		0.204	-	-	-	-
Number of Analyses		1	-	-	-	-
Mean Value		0.2040	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.184	-	-	-	-

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RL205

SEP 30 1991

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R91-11789.4 (COMPLETE)

REFERENCE INFO: RL 205C 380-722.5

CLIENT: LAC MINERALS (USA) INC.
PROJECT: ROSEBUD

SUBMITTED BY: KENNER
DATE PRINTED: 25-SEP-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	74	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	10	0.002 OPT		Fire Assay
3	AG DUP AG DUPLICATE	6	0.02 OPT		Fire Assay
4	Ag Silver	74	0.02 OPT	MULT ACID TOT DIG	Atomic Absorption
5	AU Dup Gold Duplicate	3	0.002 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	71	2 -150	71	CRUSH,PULVERIZE -150	71
P PREPARED PULP	3	4 AS REC'D	3	AS RECEIVED, NO SP	3

NOTES: # indicates ERRATIC RESULTS

REMARKS: #ERRATIC RESULTS
K GAMMON

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11789.4 (COMPLETE)

DATE PRINTED: 25-SEP-91
PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
ANALYTICAL BLANK		<0.002	-	-	-	-
ANALYTICAL BLANK		<0.002	-	-	-	-
Number of Analyses		2	-	-	-	-
Mean Value		0.0010	-	-	-	-
Standard Deviation		0.000000	-	-	-	-
Accepted Value		0.002	-	-	-	-
Number of Analyses		-	-	-	-	-
Mean Value		-	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.497	-	-	-	-
GEO TRACE STD1(1989)		-	-	-	0.99	-
GEO TRACE STD1(1989)		-	-	-	1.00	-
GEO TRACE STD1(1989)		-	-	-	1.00	-
Number of Analyses		-	-	-	3	-
Mean Value		-	-	-	0.998	-
Standard Deviation		-	-	-	0.0074	-
Accepted Value		-	-	-	1.05	-
AG ASSAY		-	-	-	3.12	-
AG ASSAY		-	-	-	3.00	-
AG ASSAY		-	-	-	3.09	-
Number of Analyses		-	-	-	3	-
Mean Value		-	-	-	3.071	-
Standard Deviation		-	-	-	0.0677	-
Accepted Value		-	-	-	3.03	-
AU ASSAY STD		0.140	-	-	-	-
Number of Analyses		1	-	-	-	-
Mean Value		0.1400	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.150	-	-	-	-

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

DATE PRINTED: 29-AUG-91

REPORT: R91-11692.4 (COMPLETE)

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
Z2 RL205C 30 35		0.004			0.03	
Z2 RL205C 35 40		<0.002			0.03	
Z2 RL205C 40 45		<0.002	<0.002	0.03	<0.02	
Z2 RL205C 45 50		<0.002			<0.02	
Z2 RL205C 50 55		<0.002			<0.02	
Z2 RL205C 55 60		<0.002			<0.02	
Z2 RL205C 60 65		<0.002			<0.02	
Z2 RL205C 65 70		<0.002			0.10	
Z2 RL205C 70 75		<0.002			0.08	
Z2 RL205C 75 80		<0.002			0.10	
Z2 RL205C 80 85		0.020			0.11	
Z2 RL205C 85 90		0.018			0.09	
Z2 RL205C 90 95		0.004	0.003		0.12	
Z2 RL205C 95 100		0.003			0.12	
Z2 RL205C 100 105		<0.002			0.07	
Z2 RL205C 105 110		<0.002			0.05	
Z2 RL205C 110 115		<0.002			0.07	
Z2 RL205C 115 120		<0.002			<0.02	
Z2 RL205C 120 125		<0.002			<0.02	
Z2 RL205C 125 130		<0.002			<0.02	
P4 BA 127		0.041	0.044	0.07	0.06	
Z2 RL205C 130 135		<0.002			<0.02	
Z2 RL205C 135 140		<0.002			0.03	
Z2 RL205C 140 145		<0.002			0.03	
Z2 RL205C 145 150		<0.002	<0.002		0.07	
Z2 RL205C 150 155		<0.002			<0.02	
Z2 RL205C 155 160		0.003			0.07	
Z2 RL205C 160 165		0.003			0.05	
Z2 RL205C 165 170		<0.002			0.08	
Z2 RL205C 170 175		<0.002			0.09	
Z2 RL205C 175 180		0.005			0.12	
Z2 RL205C 180 185		<0.002	<0.002	0.10	0.11	
Z2 RL205C 185 190		<0.002			0.08	
Z2 RL205C 190 195		<0.002			0.09	
Z2 RL205C 195 200		<0.002	<0.002		0.10	
Z2 RL205C 200 205		0.003			0.11	
Z2 RL205C 205 210		0.003			0.12	
Z2 RL205C 210 215		<0.002			0.11	
Z2 RL205C 215 220		<0.002			0.10	
Z2 RL205C 220 225		<0.002			0.05	

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PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
Z2 RL205C 225 230		0.005			0.10	
P4 BA 128		0.096			0.14	
Z2 RL205C 230 235		0.005			0.12	
Z2 RL205C 235 240		0.006			0.11	
Z2 RL205C 240 245		0.003			0.09	
Z2 RL205C 245 250		0.019	0.020		0.10	
Z2 RL205C 250 255		0.018			0.10	
Z2 RL205C 255 260		0.004			0.10	
Z2 RL205C 260 265		0.004			0.08	
Z2 RL205C 265 270		0.009			0.13	
Z2 RL205C 270 275		0.004			0.13	
Z2 RL205C 275 280		0.054			0.15	
Z2 RL205C 280 285		0.027			0.12	
Z2 RL205C 285 290		0.005			0.18	
Z2 RL205C 290 295		0.006			0.11	
Z2 RL205C 295 300		0.014	0.008		0.14	
Z2 RL205C 300 305		0.010	0.016	0.17	0.18	
Z2 RL205C 305 310		0.009			0.15	
Z2 RL205C 310 315		0.005			0.12	
Z2 RL205C 315 320		0.010			0.16	
Z2 RL205C 320 325		0.010			0.17	
Z2 RL205C 325 330		0.008			0.16	
P4 BA 129		0.095			0.14	
Z2 RL205C 330 335		0.013			0.20	
Z2 RL205C 335 340		0.022			0.18	
Z2 RL205C 340 345		0.1954	0.079		0.16	0.117
Z2 RL205C 345 350		0.016			0.16	
Z2 RL205C 350 355		0.011	0.011		0.15	
Z2 RL205C 355 360		0.012			0.20	
Z2 RL205C 360 365		0.017			0.20	
Z2 RL205C 365 370		0.015			0.15	
Z2 RL205C 370 375		0.011			0.15	
Z2 RL205C 375 380		0.051	0.049		0.13	

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REPORT: R91-11789.4 (COMPLETE)

DATE PRINTED: 25-SEP-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
D2 RL205C 380 384		<0.002			0.07	
D2 RL205C 384 388		<0.002			0.08	
D2 RL205C 388 393		0.002			0.05	
D2 RL205C 393 398		0.003			0.10	
D2 RL205C 398 403		0.004			0.08	
D2 RL205C 403 408		0.004			0.05	
D2 RL205C 408 413		0.002			0.06	
D2 RL205C 413 418		0.002			0.06	
D2 RL205C 418 423		0.006			0.07	
D2 RL205C 423 428		0.002	<0.002	0.06	0.04	
D2 RL205C 428 433		<0.002			0.07	
D2 RL205C 433 438		0.017	0.016		0.12	0.016
D2 RL205C 438 443		<0.002			0.06	
D2 RL205C 443 448		<0.002			0.07	
D2 RL205C 448 453		0.003			0.10	
D2 RL205C 453 458		<0.002			0.08	
D2 RL205C 458 463		0.008			0.07	
D2 RL205C 463 468		0.004			0.08	
D2 RL205C 468 473		0.010			0.12	
D2 RL205C 473 478		0.014	0.006		0.08	
P4 BA 160		0.086			0.09	
D2 RL205C 478 483		0.005			0.09	
D2 RL205C 483 488		0.007		0.07	0.07	
D2 RL205C 488 493		0.003			0.07	
D2 RL205C 493 498		0.003			0.08	
D2 RL205C 498 503		0.002			0.09	
D2 RL205C 503 508		0.004			0.10	
D2 RL205C 508 513		0.003		0.11	0.09	
D2 RL205C 513 518		0.004			0.10	
D2 RL205C 518 523		0.005			0.11	
D2 RL205C 523 528		0.004			0.11	
D2 RL205C 528 533		0.006	0.002		0.10	
D2 RL205C 533 536		0.008			0.12	
D2 RL205C 536 538.85		0.004			0.13	
D2 RL205C 538.85 544		<0.002			0.08	
D2 RL205C 544 547		0.002			0.10	
D2 RL205C 547 551		0.015			0.09	
D2 RL205C 551 554		0.005			0.61	
D2 RL205C 554 558		0.002			0.18	
D2 RL205C 558 562.3		<0.002			0.08	

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SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
D2 RL205C 562.3 568		0.010	0.010		0.44	
P4 BA 161		0.057			0.04	
D2 RL205C 568 573		0.008	0.003		2.53	
D2 RL205C 573 578		<0.002			<0.02	
D2 RL205C 578 583		<0.002			<0.02	
D2 RL205C 583 588		<0.002		<0.02	<0.02	
D2 RL205C 588 593		<0.002			<0.02	
D2 RL205C 593 598		<0.002			<0.02	
D2 RL205C 598 603		<0.002			0.03	
D2 RL205C 603 608		<0.002			0.07	
D2 RL205C 608 613		0.014#	0.009		0.07	0.009
D2 RL205C 613 618		<0.002			0.05	
D2 RL205C 618 623		<0.002	<0.002	0.04	0.05	
D2 RL205C 623 628		0.007			0.08	
D2 RL205C 628 633		0.010			0.09	
D2 RL205C 633 638		0.023			0.09	
D2 RL205C 638 643		<0.002			0.04	
D2 RL205C 643 648		0.005			0.07	
D2 RL205C 648 653		0.010			0.07	
D2 RL205C 653 658		0.016			0.10	
D2 RL205C 658 663		0.012			0.07	
D2 RL205C 663 668		0.057	0.054		0.16	0.058
P4 BA 162		0.033			0.19	
D2 RL205C 668 673		<0.002	<0.002	0.02	0.03	
D2 RL205C 673 678		<0.002			<0.02	
D2 RL205C 678 683		<0.002			0.04	
D2 RL205C 683 688		<0.002			0.03	
D2 RL205C 688 693		0.003			0.07	
D2 RL205C 693 698		0.005			0.06	
D2 RL205C 698 703		0.022			0.07	
D2 RL205C 703 708		0.044			0.09	
D2 RL205C 708 713		0.002			0.03	
D2 RL205C 713 718		<0.002			0.02	
D2 RL205C 718 722.5		0.003			<0.02	

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SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
RL205C 40 45		<0.002	<0.002	0.03	<0.02	
Duplicate		<0.002			0.03	
RL205C 90 95		0.004	0.003		0.12	
Duplicate		0.003				
BA 127		0.041	0.044	0.07	0.06	
Duplicate					0.07	
RL205C 145 150		<0.002	<0.002		0.07	
Duplicate		<0.002				
RL205C 180 185		<0.002	<0.002	0.10	0.11	
Prep Duplicate		<0.002		0.11	0.10	
RL205C 195 200		<0.002	<0.002		0.10	
Duplicate		<0.002				
Prep Duplicate		<0.002		0.11	0.10	
Duplicate					0.11	
RL205C 245 250		0.019	0.020		0.10	
Duplicate		0.020				
RL205C 295 300		0.014	0.008		0.14	
Duplicate		0.008				
RL205C 300 305		0.010	0.016	0.17	0.18	
Prep Duplicate		0.016			0.17	
					0.17	
RL205C 350 355		0.011	0.011		0.15	
Duplicate		0.011				

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PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
RL205C 423 428		0.002	<0.002	0.06	0.04	
Duplicate		<0.002			0.06	
RL205C 473 478		0.014	0.006		0.08	
Duplicate		0.006				
RL205C 483 488		0.007		0.07	0.07	
Prep Duplicate		0.004			0.07	
RL205C 508 513		0.003		0.11	0.09	
Duplicate					0.11	
RL205C 528 533		0.006	0.002		0.10	
Duplicate		0.002				
RL205C 562.3 568		0.010	0.010		0.44	
Duplicate		0.010				
RL205C 568 573		0.008	0.003		2.53	
Duplicate		0.003				
RL205C 583 588		<0.002		<0.02	<0.02	
Duplicate					<0.02	
RL205C 618 623		<0.002	<0.002	0.04	0.05	
Prep Duplicate		<0.002	<0.002		0.04	
		<0.002				
RL205C 668 673		<0.002	<0.002	0.02	0.03	
Duplicate		<0.002			0.02	
Prep Duplicate		<0.002	<0.002		0.04	
Duplicate		<0.002				

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
994 West Glendale Ave., Suite 7, Sparks,
Nevada, U.S.A. 89431
PHONE: 702-356-5395

To: LAC MINERALS U.S.A. INC

1395 GREG ST., STE 107
SPARKS, NEVADA
89431

Project : ROSEBUD
Comments: ATTN: TIM KUHL

Certificate Date: 30-AUG-91
Invoice No. : I9120387
P.O. Number :

CERTIFICATE OF ANALYSIS A9120387

SAMPLE DESCRIPTION	PREP CODE		Au oz/T	
AL 434 045-050	208	294	< 0.001	224 ? HO
AL 434 095-100	208	294	0.020	
AL 434 145-150	208	294	0.028	
AL 434 195-200	208	294	0.003	
AL 434 245-250	208	294	0.003	
AL 434 295-300	208	294	0.019	
AL 450 145-150	208	294	0.007	
AL 450 195-200	208	294	0.011	
AL 450 295-300	208	294	0.002	
RL 190 045-050	208	294	0.007	
RL 190 095-100	208	294	0.002	Eg
RL 190 145-150	208	294	0.005	
RL 190 195-200	208	294	0.009	
RL 190 245-250	208	294	0.002	
RL 190 295-300	208	294	0.012	
RL 190 345-350	208	294	0.005	Eg
RL 203C 115-120	208	294	0.001	
RL 203C 165-170	208	294	0.002	
RL 205C 075-080	208	294	0.001	
RL 205C 125-130	208	294	< 0.001	
RL 205C 175-180	208	294	0.003	Eg
RL 205C 225-230	208	294	0.007	
RL 205C 275-280	208	294	0.064	
RL 205C 325-330	208	294	0.008	
RL 205C 375-380	208	294	0.043	
RL 214 095-100	208	294	< 0.001	Eg
RL 214 195-200	208	294	0.007	
RL 214 295-300	208	294	0.002	
RL 214 395-400	208	294	< 0.001	
RL 214 445-450	208	294	0.004	
RL 214 495-500	208	294	0.003	LAC
RL 214 545-550	208	294	0.001	
RL 214 595-600	208	294	< 0.001	
RL 221 750-755	208	294	0.086	
RL 221 800-805	208	294	0.005	
RL 221 850-855	208	294	0.003	
RL 221 900-905	208	294	0.003	

CERTIFICATION: Sandra M Adam

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers

994 West Glendale Ave., Suite 7, Sparks,
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PHONE: 702-356-5395

To: LAC MINERALS U.S.A. INC

1395 GREG ST., STE 107
SPARKS, NEVADA
89431

Project : ROSEBUD
Comments: ATTN: TIM KUHL

Page Number :1
Total Pages :1
Certificate Date: 10-SEP-91
Invoice No. : I9121012
P.O. Number :

CERTIFICATE OF ANALYSIS A9121012

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
745-750	208	294	0.001
895-900	208	294	0.003
RL-205C 423-428	208	294	0.002
RL-205C 473-478	208	294	0.014
RL-205C 523-528	208	294	0.003
RL-205C562.3-568	208	294	0.010
RL-205C 613-618	208	294	0.004
RL-205C 663-668	208	294	0.079
RL-205C 713-718	208	294	< 0.001
RL-222 195-200	208	294	< 0.001
RL-222 395-400	208	294	< 0.001
RL-222 495-500	208	294	< 0.001
RL-222 545-550	208	294	< 0.001
RL-222 595-600	208	294	0.002
RL-222 645-650	208	294	< 0.001
RL-222 695-700	208	294	< 0.001
RL-222 795-800	208	294	0.004
RL-222 845-850	208	294	0.004

CERTIFICATION:_____