6000142

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-200C
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 873'; handwritten notes 47p.

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	5/20/08
DB:	mah	
SCANNED:		

Revised: 1/22/08

DRILL LOGS RL-200
Rosebud

6000142: 4010

60001421

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RL200C TOTAL DEPTH 873 LOGGED BY KLK

Date started 6-30-91

Date completed 7-3-91

Initial bearing vertical

Initial inclination

Elevation 5345.2

Collar coordinates:

N 2203915.0

E 483148.4

Contractor: COATES

Drill Type: UOR

Hole Size: HQ to N reduction

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

DRILL HOLE RL-200

Page 1 of 4

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	% WASH RECOV
									burg red brn					0-325 CHOCOLATE TUFF 0-5 colluvium	<	<		
05	CT	~ Ox							sage gy brn + limonite				<1% limon replac dissm py	5-75 pervasively ~2% bx'd w/ limonite ± bx'd w/ Fracture fill wh, local fibrous gypsum wh local limonite fractures, weakly perv bleached.	↓	↓		
10																		
15															4/<	4/<		
20															<	<		
25															↓	↓		
30																		
35																		
40																↓		
45		~ Ox												45-75 m-s limon ltc clays; perv argillic clay alt.	↓	.04	.001	
50															.003	<		
55															.004	.03		
60															.008	.04		
65															4/<	.04		
70															<	.05		
75		~ wk Ox ltltm											1-2% diss'd vnlt py + pods chalcop	75-100 lt buff green tuffaceous pervasive silicification weak intermittent limonite along fractures, weak to mod perv. druzy qtz encapsulated by qtz ± poss local chalcopy	<	.04		
80															4/.003	.04		
85															<	.04		
90		~													↓	<		
95		~														<	<	
100																		

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DRILL HOLE RL-200

Page 2 of 4

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	% VASH RECOV
	CT	~							lt sage green				≤1% diss ±vn py	0-325 CT 100-105 lt sage green wbl tr limonitic fractures chlorite	<	</<		
105									sage green + red bwn					alt. phenos wk local fine stk wk qtz vns 105-115 mixed lt grn G		<		
110														described @ above w/ mixed zones of red brown unalt chocolate				
115									lt sage green					115-195 sage green - whey bl fine grained to granular tuff				
120														wh argillic clay alt wh local druzy qtz encapsulated pyrite vns				
125														which ↑ at depth ~ 165'-185' w/ poss local chalcopyrite w/ druzy	</<	.03		
130													2-3% @ above	qtz vns is amber brown qtz throughout are amber brown to	</.003	.10		
135		~ HH Xk												orange SiO2 fract vns tr local limon fractures wk	.003/.003	.07		
140														perv. calcite vns	<	.06		
145																<	.001	
150																.03		
155																.04		
160		~													.004	.04		
165		HH												165-195 ↑ perv. druzy qtz	.005	.09		
170		HH												encap. py ± chalco pyrite vns becomes more	.010/.007	.08		
175		HH												sacroidal in texture w/ ↑ amber -	.013	.14		
180		HH											3-4% @ above	orange SiO2 vns	.008	.08		
185														185-200 signif ↑ perv. argill	.004	.06		
190													±2% @ above	clay alt	<	.05/.05		
195									flesh + green + buff					195-200 buff to orange amber bwn SiO2 rich wh local pods of clay wh druzy	<	.07	.003	
200														qtz encapsul sulfide vns + diss py ± chalco				

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DRILL HOLE RL-200

Page 3 of 4

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	% WASH RECOV
	LT.	~XK+PPP							CK sage green				2-3% diss+ vn py ± local	0-325 CT pervasive chl, lt sage green FGT weak, pervasive argillic but w/ to local strong, orangish amber SiO2 vns;	.017 / .017	.25		
205													chalcopy + post / local py replac					
210													marcas.		.009 / .005	.07		
215														fracture fill, weak to local strong, druzy qtz encapsulated	.004	.05		
220														pyrite vns w/ local py replacing marcasite ± chalco- py in vns ± diss w/ local calcite vns	<	<		
225													4-5% @ above	w/ local calcite vns ± blebs of ±1mm orange mineral	.003 / .002	.03		
230														trans- lucent local assoc w/ sulfides 225-235 - str ↑ sulf. content + rcd orange SiO2 vns	.006	.11		
235													2-3% @ above	strong orange amber SiO2 vning	.006	.13		
240															<	.03		
245																<		
250														245 → 260 str ↑ cliss + vn sulf. + intermittent ↑ rcd org SiO2 vns		.04	<	
255													4-5% @ above		.004	<		
260		HHH											3-4% @ above	mod str druzy qtz py vns	.023 / .022	.46		
265													2-3% @ above		<	<		
270															½<	<		
275															½<	½<		
280													±2% @ above		<	<		
285																.05		
290																.07		
295																<	.006	
300																		

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DRILL HOLE RL-200

Page 4 of 4

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	% WASH RECOV
	CT	~ XK HTH							lt sage green				±2% diss + vn py	0-325 CT same descrip as above w/ amber orange SiO2 vns + druzy qtz	<	<		
305														encap sulf vns	<	<		
310													3-4% @ above	↑ diss + vn qtz encap. sulf.	.006	.03		
315													2-3% @ above		.003	.04		
320															<	.04		
325														T. D.				
330																		
335																		
340																		
345																		
350																		
355																		
360																		
365																		
370																		
375																		
380																		
385																		
390																		
395																		
400																		

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 1 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION	ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
325	83			tr VN py		W bl	CORE BEGAN @ 325'	NO SAMPLE					
	98						325-597.5 CHOCOLATE - FINE GRAINED TUFF PERVASIVELY HEMITITIC						
330			Δ VN 40°	NIL-tr diss py		FRESH	Pervasively relatively fresh, unaltered reddish-gray brown, 1-3 % plagioclase; biotite phenos which are locally altered to white clay or chlorite. Weakly intermittently bleached in association w/ zones that are veined, thus acidic fluids create a bleached halo.						
		50° 10		~1% VN py		W bl							
340	95	CaCO3 VNS + local py VNS		NIL to tr diss py		FRESH	Pervasively weak fracture veinlets w/ hemititic fill. Weak calcite veining ~1-2VN/10' w/ local hemitite w/ $CaCO_3$						
350	100		Δ VN 30°-35°				In local bleached zones; weak pyrite vning. Locally C_T is tectonically brecciated w/ size clast of a volc. bxa. Intermittent vein Δ w/ hemititic matrix w/ wk local $CaCO_3$						
							325-329 w/ bl						
							335-340 w/ bl w/ wk py veining						
360	98		Δ VN 45°				370-376 w/ bl wk local volc bxa wk pyrite-dissem seams						
			Δ VN 45°										
370	96			≤1% diss py		W bl							
380	99			NIL-tr diss py		FRESH							
390	110												

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 2 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION	ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
400	69 / 94	py vn / 30°	Δ vn / 40°	~1% v. fine diss py + wk vn py		w bl	325-597.5 CT (Continued) description @ above 392-398.5 wk perv bl, intermittently tectonically brecciated w/ wk orange clay matrix, weak green hue w/ ~3-4% chlorite alt phenos. @397.3 is a 3" py vein @ 30° to C.A.	NO SAMPLE					
410	98			NIL TO TR diss py		FRESH to TR bl							
420	99	30° 15 CaCO3 vns											
430	100			1% diss py		w bl	450-462 w/ perv bl w/ ±2% phenos replaced by chlorite and/or clay, pervasively fractured subparelle ~10° to C.A. - open spaced; lined w/ $CaCO_3$ ±poss SiO_2 + marcasite + local lt green clays + wk orange oxide? + local dk gray to black-powdery looking sulfide						
440	100		Δ vn / 45°	NIL to TR diss py		FRESH w/ TR bl							
450	100			1+% diss + vn py + vn marcasite talc gray silic		w bl							
460													

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 3 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION	ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
	101			NIL to TR vi fine diss py		FRESH	325-597.5 CT (continued)	NO SAMPLE					
470	100						462-482.7 intermittently tectonically bxa & relatively fresh - unaltered & elsewhere perv. crackle fracturing w/ hemitite fill ± local $CaCO_3$, ↑ calcite vning to ~ 2-5/ft.						
480	90	20 60 $CaCO_3$ VNS		≤1% diss + VN + buck shot py		V.W bl	482.7-510.5 very weakly bleached intermittently tectonically brecciated to crackle fractured weak local army green clay veining locally assoc. w/ calcite. on average ~ 1-2 calcite vns/ft.						
	101												
490	98			TR diss py		FRESH to TR bl							
						W bl							
500						FRESH							
	100					W bl							
510	98			TR diss py		FRESH	510.5-542.3 relatively fresh pervasive tectonic brecciation ↓ hemitite alt w/ predom. concentration of hemitite w/ in fracture matrix, v.wh local green clay - waxy & fairly hard w/ in pods						
520	98												
530													

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 4 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION	ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
	99			tr cliss py		Wbl	325-597.5 CT (continued) 586.7-617 SRF	NO SAMPLE					
540	101	20, 60 CaCO3 vns					542.3-586.7 Relatively fresh unaltered lt gray w/ lilac hue CT. Decrease in overall hematite, it is predom. concentrated w/ in crackle fracture vns & tectonic Δ matrix. local phenos replaced w/ calcite + pyrite. Weak calcite veining ~ 2-5/ft. local phenos clay alt w/ tr blood red oxide + black mgl vs dk gray black sulfide local plagioclase phenos alt to chlorite						
550	98												
560	94												
570	100						586.7-617 SOUTH RIDGE FAULT						
580	95						→ pervasive peach w/ wk green hue 542.3-597.5 chocolate - lithic lapilli sized brecciation - tectonic - hangwall alt above fault, clasts are pervasively bleached & clay alt matrix is weakly reddish. upper contact shear is 45° to C.A. mod white kaolinite veining & filling interstices of rock fabric w/ wh assoc sericite + wh local pods of pyrite. intermittent clay gouge zones, peruthin white kaolin ± SiO2 vnlets						
590	106	30° clay stringers	±45° FAULT CONTACT SRF 50°	2% vnt cliss py	±45°	m-s bl M-S	542.3-543.1 bl lt green clay gouge - brittle 590.8-591.5 " " " " " - soft 596-597.5 - broken rubble & fault gouge	585.5-590.5				<	<
								590.5-593.5				<	<
								593.5-597.5				<	.07
600				≥15% qtz vnlets	50°	S+bl XXX		597.5-600.5				<	.17

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 5 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION	ASSAYS: Sample No.	% Cu	% Pb	✓ Au	oz/t Au	oz/t Ag
600	97	30° ± 10° ± 90°		2-3% diss tVN PY + marcasite chalcopy PY ± VG ?		M-S bl S XXX	604.9 - 873 Dozer Tuff 597.5 - 600 Hydrothermal breccia ~ 3-4 stages of Δ, matrix supported w 10-35% clasts, matrix is SiO2 rich 597.5 - 598.5 matrix supp. - buff hydro Δ w/ subangular to rounded clasts which are grey to flesh to gray. some clasts are riddled w pre-existing stkwk qtz + sulfides. local Δ clasts w/ vn Δ clasts are rich (20-50% w diss. sulfides. Overall poss up to 4-5 stages of Δ. No prominent overprint vning or brecciation Δ	600.5-604.5				.027	.09
610	101	80° Δ VN				M-S bl W M-S XX		604.5-609				.004	.11
								609-613				.17	.18
620	99							613-617				.196 / .241	.28 / .33
								617-621				.057	.05
							598.5 - 599.5 dark gray sulf rich hydro Δ w/ individual clasts rich w sulf. weak SiO2 + py overprint vning 599.5 - 600 blonde hydro Δ w weak pervasive green hue 2-3 stages stkwk qtz ± py vning	621-626			.072	.065	.16
630	97			3-4% diss tVN PY + VN marcasite + local dk gray Ag sulfide		M-S bl W ~ W-M XX local SXXX		626-631.5				.027	.09
							600 - 604.5 Lt sage green hue breccia w buff to flesh to celadonite green alt clasts 3-4 stgs Δ intermittently riddled w fine qtz stkwk ± local 5-10 mm vns lined w SiO2 ± filled w SiO2 + kaolin ± py ± marcasite, 3-4 stages of vning ± mass. sericite	631.5-637				<	.03
640	104						604.5 - 873 DOZER TUFF	637-642				<	<
		80° ± 10°					604.5 - 624 Lt sage green dozer tuff, very bleached w w-m pervasive silicification + wk argillic clay alt. Intermittently brecciated ~2 stages. Internal veining throughout consisting of: 1) finely riddled w hairline qtz ± pyrite stkwk ± local kaolinite 2) hydrothermal SiO2 rich matrix Δ veins up to 35 mm wide preferentially filled w SiO2 ± clay mix w local pods of kaolinite + sericite sulfides consist of pyrite ± marcasite ± chalcopy. any V.G is questionable w/in veins Δ is 1-2 stages @ most overall veining decreases from 617-624 604.5 - 617 26-50 VNS/ft 617-624 ± 8 VNS/ft # 2 VN ! fine qtz stk reaches up to 30-50 VNS/ft 662.75 - 663 pure white clay + SiO2 mix @ ~ 40° to CA.	642-647				<	.02
650	81							647-652				.006	.04
								652-655.5				.009	.14
660	101	Δ 45 VN						655.5-661				<	.05
								661-664				< / <	.04
670								664-668.5				<	.03

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 6 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.
	100			1-2% diss tvn py + marcasite		M bl W poss wx
680	105			±2% @ above + poss chalco in vns		X
690	104 / 89	80° all vning		3-4% diss tvn py + vn marcasite + wk poss dk gray bun Ag sulfide		
700	94					
710	103					X
720	99			2-3% diss tvn py + vn marcasite		
730	100					
740						

DESCRIPTION

604.9 - 873 Dozer TUFF

624 - 745 FGT - DT pervasive weak to mod bleaching, poss wh perv. silicification intermittently brecciated to crackle fractured. Intermittent vein breccias w/ 1-3 stages of Δ locally clasts are remained in SiO_2 & surrounded w/ pods of kaolinite & w/ in an SiO_2 lattice stkwk & speckled w/ pods of sulfides py ± marcasite, local xtaline barite. Local pure SiO_2 + kaolinite + sericite veins up to 60 mm (2½") hydro Δ vns all interconnected ∴ uncountable

678 - 682 ↓ veining ↑ perv. brecciation & ↓ Δ vns

617 - 655 w-m thin vnlets, py + qtz ± kaolin: abundant healed fracts w/ tr grn clay

682 - 698.5 m-s hydrothermal breccia veining w/ intermittent m-s perv. silicification w/ in vns 2-3 stages Δ, SiO_2 rich matrix which holds most sulfides, overprinted w/ fine qtz stkwk

698.5 - 709.5 predom vning fine stkwk qtz + druzy qtz lining vns filled w/ kaolin + sericite + marcas. few local barite crystals

709.5 - 716 zone of m-s milky white fairly hard mixed qtz + SiO_2 stkwork breccia in fill

716 - 731 decrease in vein breccia at prominent veining consists of vuggy druzy qtz vns filled w/ intermittent mixed SiO_2 + white clay + local pods of kaolinite + sericite + marcasite also riddled w/ fine hairline qtz stockwork average of 20-40 vns/ft.

731 - 745 veining decreases even more to predom. to fine qtz stkwk + fine ± 1 mm druzy qtz lined vns w/ barite marcasite ± py + tr local yellow org clay, only tr. micro vn Δ. total of 15-25 vn/ft

ASSAYS

Sample No.	% Cu	% Pb	✓ Au	oz/t Au	oz/t Ag
668.5-673			.025	.012	.03
673-678				.010	.05
678-683				.054	.05
683-688				.041 / .016 #	.06 / .09
688-693				.002 / .003	.08
693-698				<	.42 / .35
698-703				.060	.11
703-707.5				.030 / .030	.14
707.5-712.5				.039	.05
712.5-717.5				.006 # / < / .012	.06
717.5-722.5				.003	.07
722.5-727.5				.003	.05
727.5-733				.018 / .016	.09
733-737				.012	.11
737-743				<	.08

DRILL HOLE # RL-2006 LOGGED BY KLK DATE 7-91 PAGE 7 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION
750	100		40° / VN	2-3% diss + vn py + vn marcasite		M-S bl M~ w local green wk local x	604.9 - 873 DOZER TUFF 745-843: DT predominantly pervasive brecciation - possibly tectonic w/ DT clasts ranging in size from 2-100 mm clasts are pkw bl white + local lt green w/ fine tuffaceous matrix clast supported. Intermittently matrix becomes orange w/ local SiO2 flooding. Questionable secondary brecciation or is a brecciated lithic lapilli tuff. (probable 2ndary Δ) ±65% clasts. Overall moderate argillic clay alt. w/ weak to weakly moderate veinlets consisting of pyrite + quartz + kaolinite and weak drusy qtz encapsulated barite + marcasite + kaolinite veins. 745-764 averages ~ 8-25 vns/ft w/ ↑ # of very fine qtz stkwk uncountable 764-830 veining averages ~ 4-8 vns/ft of prominent qtz+py ± barite ± marcasite vns ± 1mm. Intermittent fine hairline qtz stkwk decreases; remains uncountable 755-764 prominent orange matrix w/ intermittent lt green clay fracture fill. 756.9 ~ 2mm gray SiO2 rich Δ vn w/ fine diss sulfs. 788.5-788.6 lt-medium gray silty looking seam - soft w/ fine dissem sulfides ~ 80° to C.A. 798-799 weak-mod pervasive silicification w/ white clay; local barite fracture vns
760	101		45° / VN				
770	105		65° mineralized qtz sulf vns + barite	±2% diss + vn py + vn marcasite			
780	96						
790	96		70° fine marvin qtz stkwk				
800	101					XX	
810							

Sample No.	% Cu	% Pb	Ag	oz/t Au	oz/t Ag
737-743				<	.08
743-749				.002	.20
749-754.5				.009	.03
754.5-760				<	.04
760-764				<	.04
764-769				< / .003	.03
769-774			.002	<	.04
774-779				.003	<
779-784				<	
784-789					
789-794					
794-799					
799-804					
804-809				.002	.03

HOLE # RL-200C LOGGED BY KLK DATE 7-91 PAGE 8 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION
	106	0°		±2% diss +VN py + marca site		W-S bl M ≈ W local X	604.9 - 873 DOZER TUFF
	98	60° qtz py VNS ± barite		±3% VN + diss py ± diss short gray bladed sulfide			745-843 DT @ described above
820							816-818 moderately pw silicified w/ barite rich vein fill
	72						828.4-828.5 lt-med gray silty looking seam - soft w/ fine dissem sulfides
							831.3-831.7 well silicified Δ in, w/ dk gray sulfides + barite
830						XX	831.7-837 - increased veining composed of kaolinite + barite + sericite + barite + wh local lt orange clay.
	103						837-842.5 mod.-str lt butterish-orange clay filled fractures.
840							843-873 Lt. green FGT weakly bleached, wh argillic clay alt. weak celadonite + pyrite ± white kaolinite filled fracture veins mod ≤ 1mm veinlets filled w/ pyrite + quartz + kaolinite + barite locally butter yellow vns averaging ~ 12-25 vns/ft Intermittently riddled w/ fine hairline qtz stkwk reasonably uncountable. Few local orangish micro vein breccias tending to be 0-40° to C.A.
	101			±2% diss +VN py		W bl W ~	
850							
	96	0°					
		90° qtz py sulf. VNS					
860							
	101						
873							873 T.D.

ASSAYS

Sample No.	% Cu	% Pb	✓ Au	oz/t Au	oz/t Ag
809-814				<	.03
814-818				.002	.06
818-823			.002	</<	.05/.03
823-828				<	.03
828-833				<	<
833-838				.002	<
838-842				<	<
842-847.5				</<	</<
847.5-852.5				<	<
852.5-858				<	.03
858-863				<	<
863-868				.026	.03
868-873			.006	.010/.010	.08

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: DOZER LOGGED BY: SAS PAGE 1 OF 5

HOLE NO.: RL-200C DIP: VERTICAL CORE SIZE: HQ DATE: 7-10-91

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
325	330	5'	4.5	3.85	9	90%	77%	2.0	10-60°	VN/TH, FD/CLY/PL-R
330	335	5'	4.95	4.65	5	99	93	1.0	40-80°	VN/TH, FD/CAL, CLY/PL-R
335	340	5'	5.0	5.0	3	100	100	0.6	40-45°	VN/TH, FD/CAL, CLY/PL-R
340	345	5'	4.6	4.1	7	92	82	1.5	30-50°	VN/TH-OP, FD/CAL/PL-R
345	350	5'	5.0	5.0	4	100	100	0.8	30-50°	VN/TH, FD/CAL, CLY/PL-R
350	355	5'	5.0	5.0	4	100	100	0.8	40-70°	VN/TH, FD/CAL/PL-R
355	360	5'	5.0	5.0	2	100	100	0.4	35-45°	VN/TH, FD/CAL, CLY/R
360	365	5'	4.75	4.75	3	95	95	0.6	60-65°	VN/TH, FD/CAL/R
365	370	5'	4.95	4.75	5	99	95	1.0	55-70°	VN/TH, FD/CAL, CLY/R
370	375	5'	4.75	4.75	2	95	95	0.4	60-65°	VN/TH, FD/CAL, CLY/PL-R
375	380	5'	4.9	4.9	0	98	98	0.0	—	
380	385	5'	4.85	4.85	2	97	97	0.4	50-65°	VN/TH, FD/CAL, CLY/PL
385	390	5'	5.0	5.0	3	100	100	0.6	35-85°	VN/TH, FD/CAL, CLY/PL-R
390	395	5'	5.6	4.5	11	92	90	2.0	50-80°	VN/TH, FD/CLY, ± CAL/PL-R
395	403	8'	4.8	2.95		60	37	0.6		NOTE: "Mislatch" at block 403', Coarse rubble and core chunks 397.5'-402.5'
					3				45-85°	VN/TH, FD/CLY/R
403	410	7'	6.3	6.05	6	90	86	1.0	60-85°	VN/TH, FD/CLY, ± CAL/PL-R
410	415	5'	5.0	4.45	6	100	89	1.2	60-85°	VN/TH, FD/CLY, ± CAL/PL-R
415	420	5'	4.7	4.7	5	94	94	1.1	55-75°	VN/TH, FD/CLY, ± CAL/PL-R
420	425	5'	5.05	4.95	5	101	99	1.0	60-90°	VN/TH, FD/CLY, CAL/PL-R
425	430	5'	4.85	4.55	7	97	91	1.4	55-90°	VN/TH, FD/CLY, CAL/PL-R
430	435	5'	5.0	4.7	5	100	94	1.0	30-80°	VN/TH, FD/CLY, ± CAL/PL-R
435	440	5'	4.8	4.8	5	96	96	1.0	50-75°	VN/TH, FD/CLY, CAL/PL-R
440	445	5'	4.9	3.25	14	98	65	2.9	30-75°	VN/TH, FD/CLY, CAL/PL-R
445	450	5'	4.7	3.4	13	94	68	2.8	0-70°	VN/TH, FD/CLY, ± CAL/PL-R
450	455	5'	5.05	3.9	14	101	78	2.8	0-65°	VN/TH, FD/CAL, CLY/R
455	460	5'	4.2	1.9		84	38	3.8		NOTE: 455'-460' Has zones of coarse rubble and core chunks
					16				0-50°	VN, ± VG/TH-OP, FD/CLY, CAL/W-R
460	465	5'	5.0	2.35	20	100	47	4.0	0-70°	VN/TH, FD/CLY, CAL/W-R

GEOTECHNICAL LOG

PAGE 2 OF 5

PROJECT: ROSEBUD LOCATION: DOZER LOGGED BY: SAS

HOLE NO.: RL-200C DIP: VERTICAL CORE SIZE: HQ DATE: 7-10-91

1 FROM	2 TO	3 CORE RUN	4 RECOVERED CORE	5 TOTAL LENGTH OF CORE>4"	6 NO. OF FRACTURES	7 CORE RECOVERY (%) (4/3 X 100)	8 R.Q.D. (%) (5/3 X 100)	9 FRACTURES PER FT. (6/4)	10 RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	11 REMARKS
465	470	5'	4.95	3.4	10	99%	68%	2.0	0-75°	VN/TH, FD/CLY, CAL/R
470	475	5'	5.0	5.0	3	100	100	0.6	40-70°	VN/TH, FD/CLY, CAL/R
475	480	5'	5.1	4.75	7	102	95	1.4	55-80°	VN/TH, FD/CLY, CAL/R
480	485	5'	4.8	2.55	11	96	51	2.3	55-70°	VN/TH, FD/CLY, CAL/W-R
										NOTE: SMALL CLAY GOUGE at 484.5'
485	490	5'	4.95	4.8	4	99	96	0.8	50-65°	VN/TH, FD/CLY, ± CAL/R
490	495	5'	5.15	4.65	5	103	93	1.0	55-60°	VN/TH, FD/CLY, CAL/R
495	500	5'	4.95	3.9	6	99	78	1.2	25-60°	VN/TH, FD/CLY, CAL/R
500	505	5'	4.7	4.1	7	94	82	1.5	45-75°	VN/TH, FD/CLY, CAL/R
505	510	5'	4.7	4.3	1	94	86	0.2	80°	VN/TH, FD/CLY/R //// NOTE: Clay Gouge @ 506'
510	515	5'	5.0	4.7	5	100	94	1.0	55-75°	VN/TH, FD/CLY, ± CAL/R
515	520	5'	4.9	4.6	5	98	92	1.0	65-75°	VN/TH, FD/CLY, ± CAL/R
520	525	5'	5.0	5.0	1	100	100	0.2	65°	VN/TH, FD/CLY/R
525	530	5'	4.7	4.7	0	94	94	0.0	—	—
530	535	5'	5.1	5.1	2	102	102	0.4	50-65°	VN/TH, FD/CLY, CAL/R
535	540	5'	4.75	2.85	16	95	57	3.4	35-80°	VN/TH, FD/CLY, CAL/R
540	545	5'	4.95	3.25	11	99	65	2.2	30-70°	VN/TH, FD/CLY, CAL/R
545	550	5'	4.8	2.75	14	96	55	2.9	40-60°	J, VN/TH, FD/CLY, CAL/R
550	555	5'	4.95	4.65	3	99	93	0.6	50-65°	VN/TH, FD/CLY, CAL/PL-R
555	560	5'	4.85	4.85	2	97	97	0.4	65-70°	VN/TH, FD/CLY, CAL/R
560	565	5'	5.0	5.0	2	100	100	0.4	50-55°	VN/TH, FD/CLY/R
565	570	5'	4.5	4.5	2	90	90	0.4	60-70°	VN/TH, FD/CLY, CAL/R
570	575	5'	4.95	4.95	3	99	99	0.6	55-60°	VN/TH, FD/CLY, CAL/R
575	580	5'	4.95	4.95	4	99	99	0.8	65-80°	VN/TH, FD/CLY, CAL/R
580	585	5'	5.0	5.0	8	100	100	1.6	20-80°	VN/TH, FD/CAL, CLY/PL, W-R
585	590	5'	4.2	2.5	10	84	50	2.4	30-70°	J, VN/TH, FD/CLY, CAL/R
590	597.5	7.5'	7.5	2.85	13	100	38	1.7	5-65°	VN/TH, FD/CLY/R
										NOTE: Clay-Gouged Shear zones at 591', and 596.5-597.5
597.5	604.5	7'	7.2	7.0	2	103	100	1.1	50-55°	F/TH, FD/CLY/S
					6				25-70°	VN, ± VG/TH-OP, FD/QTZ, CLY, ± MAR/R

GEOTECHNICAL LOG

PAGE 3 OF 5

PROJECT: ROSEBUD LOCATION: DOZER LOGGED BY: SAS

HOLE NO.: RL-200C DIP: VERTICAL CORE SIZE: HQ / N DATE: 7-11-91

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
604.5	610	5.5'	5.25	5.0	6	95%	91%	1.1	0-60°	VN, VG/TH-OP, FD/QTZ, CLY/R
610	615	5'	5.05	5.05	3	101	101		30-60°	VN, VG/TH, -OP, FD/QTZ, CLY/R
615	621	6'	6.0	5.5	7	100	92	1.2	45-85°	VN, ±VG/TH-OP, FD/QTZ, CLY/R
621	625	4'	4.0	3.4	8	100	85	2.0	0-65°	VN, ±VG/TH-OP, FD/QTZ, CLY/R
										NOTE: Reduction to "N" size core at 621'.
625	630	5'	4.8	4.8	2	96	96	0.4	40-60°	VN, ±VG/TH, FD/QTZ, CLY/R
630	635	5'	4.95	4.95	1	99	99	0.2	45°	VN/TH, FD/QTZ, PY/R
635	640	5'	4.6	2.7	10	92	54		0-65°	J, VN/TH, FD/CLY, ±QTZ, ±MAR/R
										NOTE: Broken rubble 639.5'-640'
640	645	5'	5.1	4.3	6	102	86	1.2	40-70°	J, VN/TH, FD/CLY, ±QTZ/R
645	650	5'	5.2	4.7	2	104	94	0.4	50-60°	J, VN/TH, FD/CLY, QTZ/R
										NOTE: Small zone of broken rubble @ 649.5'
650	655	5'	5.0	3.3	6	100	66	1.4	50-80°	J, VN/TH, FD/CLY, ±QTZ/R
					1				25°	VN, VG/TH-OP, FD/QTZ, CLY, MAR/R
655	660	5'	3.4	1.4	13	68	28	3.8	0-65°	VN, ±VG/TH-OP, FD/CLY, QTZ, ±BAR/R
660	665	5'	4.25	3.65	9	85	73	2.1	0-70°	VN, ±VG/TH-OP, FD/CLY, QTZ/R
										Note; zone of vuggy rubble @ ~663'.
665	670	5'	5.2	3.15	12	104	63	2.3	0-80°	VN, ±VG/TH-OP, FD/QTZ, CLY, ±MAR/R
670	675	5'	5.0	4.2	7	100	84	1.4	35-70°	VN/TH-OP, FD/QTZ, CLY/R
675	680	5'	5.0	5.0	2	100	100	0.4	0-20°	VN, VG/TH, FD/QTZ/R
680	685	5'	4.95	4.95	5	99	99	1.0	5-80°	VN, ±VG/TH, FD/CLY, ±QTZ, R
685	690	5'	5.6	5.6	6	112	112	1.1	5-70°	VN, ±VG/TH, FD/CLY, QTZ, R
										Note: Clay gouge @ 693.8'
690	695	5'	5.05	4.3	4	101	86	0.8	20-65°	VN, VG/TH-OP, FD/QTZ, CLY/R
695	700	5'	3.95	3.95	2	79	79	0.5	40-70°	VN, VG/TH-OP, FD/QTZ, CLY/R
700	705	5'	5.2	4.3	12	104	86	2.3	0-65°	VN, VG/TH-OP, FD/QTZ, CLY, ±MAR/R
705	710	5'	4.0	4.0	7	80	80	1.8	0-70°	VN, VG/TH-OP, FD/QTZ, CLY/R
710	715	5'	5.0	4.45	6	100	89	1.2	5-70°	VN, VG/TH-OP, FD/QTZ, CLY/R
715	720	5'	5.1	3.8	4	102	76	0.4	15-35°	VN, ±VG/TH-OP, FD/QTZ, CLY/R
720	725	5'	5.0	4.65	7	100	93	1.4	50-80°	VN, ±VG/TH, FD/CLY, QTZ/R
725	730	5'	4.75	3.8	3	95	76	2.1	25-40°	VN, VG/TH, FD/QTZ, CLY/R
					7				65-80°	J, VN/TH, FD/CLY/R

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: DOZER LOGGED BY: SAS 642-647 647-652 PAGE 4 OF 5

HOLE NO.: RL-200 C DIP: VERTICAL CORE SIZE: N DATE: 7-11-91

1 FROM	2 TO	3 CORE RUN	4 RECOVERED CORE	5 TOTAL LENGTH OF CORE>4"	6 NO. OF FRACTURES	7 CORE RECOVERY (%) (4/3 X 100)	8 R.Q.D. (%) (5/3 X 100)	9 FRACTURES PER FT. (6/4)	10 RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	11 REMARKS
730	735	5'	4.8	2.5		96%	50%	1.3		Note: 732'-735' Has zones of broken, clayey rubble.
					5				50-55°	J, VN, TH, FD/CLY/R
					1				35°	VN, VG/TH, FD/QTZ, CLY/R
735	740	5'	4.55	4.4	4	91	88	1.3	15-45°	VN/TH, FD/CLY/R
					2				20-65°	VN, VG/TH, FD/QTZ, CLY/R
740	745	5'	4.9	4.9	5	98	98	1.0	40-60°	VN/TH, FD/CLY/R
745	750	5'	4.8	4.25	5	96	85	1.0	40-80°	VN/TH, FD/CLY/R
750	755	5'	4.85	2.0		97	40	2.5		Note: 750'-760' vuggy broken rubble.
					12				15-75°	VN/TH, FD/CLY/R
755	760	5'	5.0	4.2	7	100	84	1.4	40-85°	VN/TH, FD/CLY/R
760	765	5'	5.0	5.0	1	100	100	0.2	20°	VN/TH, FD/QTZ, CLY, ± PY/R
765	770	5'	4.3	2.1	1	86	42	1.4	50°	J, VN/TH, FD/CLY/PL, S
					5				0-80°	VN/TH, FD/CLY/R
										NOTE: 766'-771' Broken rubble and small core chunks
770	775	5'	5.0	3.6	11	100	72	2.2	0-70°	VN/TH, FD/CLY/R
775	780	5'	5.3	4.8		106	96	1.1		NOTE: small clay gouge @ 779',
					6				70-80°	J, VN/TH, FD/CLY/R
780	785	5'	4.1	2.0	1	82	40	1.5	0-30°	VN/TH, FD/QTZ, CLY/R
					5				60-80°	J, VN/TH, FD/CLY/R
785	790	5'	4.85	4.0	7	97	80	1.4	40-80°	J, VN/TH, FD/CLY/R
										NOTE: Clay gouge @ 787'
790	795	5'	4.9	4.9	5	98	98	1.0	30-40°	VN, ± VG/TH-OP, FD/QTZ, CLY, BAR/R
795	800	5'	4.5	2.7	10	90	54	2.7	25-65°	J, VN/TH, FD/CLY/R
					2				0-25°	VN, ± VG/TH, FD/QTZ, CLY/BAR/R
800	805	5'	5.1	4.85	4	102	97	0.8	40-70°	J, VN/TH, FD/CLY/R
805	810	5'	4.8	4.5	2	96	90	0.6	0-20°	VN/TH, FD/CLY/R
					1				65°	J, VN/TH, FD/CLY/W
810	815	5'	4.9	3.8	12	98	76	2.4	45-90°	J, VN/TH, FD/CLY/R
815	820	5'	5.35	4.5	6	107	90	1.5	40-50°	VN/TH, FD/CLY/R
					2				0-15°	VN, VG/TH-OP, FD/QTZ, BAR, CLY/R
820	825	5'	4.65	3.75	9	93	75	1.9	25-70°	J, VN/TH, FD/CLY, ± QTZ/R

GEOTECHNICAL LOG

PAGE 5 OF 5

PROJECT: ROSEBUD LOCATION: DOZER LOGGED BY: SAS

HOLE NO.: RL-200C DIP: VERTICAL CORE SIZE: N DATE: 7-12-91

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
825	830	5'	3.7	2.6	7	74%	52	1.9	25-80°	J, VN/TH, FD/CLY/R
										Note: Clay gouge @ 828.5'
830	835	5'	3.35	0.7	9	67	14	2.7	10-60°	VN/TH, FD/CLY, BAR/R
										Note; 830.5'-832.5' contains zones of vuggy, clayey rubble.
835	840	5'	4.9	3.95	6	98	79	1.2	30-65°	VN, ± VG/TH, FD/CLY, ± BAR/R
840	845	5'	5.05	3.5	5	101	70	1.2	30-70°	VN/TH, FD/CLY, ± BAR/R
					1				0-55°	VN, VG/TH-OP, FD/BAR, CLY/R
										NOTE: Clay gouge @ 844'
845	850	5'	4.95	4.3	3	99	86	0.6	5-35°	VN, VG/OP, FD/QTZ, CAL, BAR, CLY/R
										Note: small clay gouge @ 846'
850	855	5'	5.0	4.85	2	100	97	0.4	15°	VN, VG/TH-OP, FD/QTZ, BAR, CLY/R
855	860	5'	4.6	4.4	4	92	88	0.9	70-75°	VN/TH, FD/QTZ, CLY, MAR/R
860	865	5'	5.0	4.1	5	100	82	1.2	25-85°	VN/TH, FD/CLY, MAR/PL-R
					1				40°	VN, VG/OP, FD/QTZ, BAR, CLY/R
865	870	5'	5.0	5.0	7	100	100	1.4	40-75°	VN, ± VG/TH-OP, FD/QTZ, CLY, BAR/R
870	873	3'	3.05	2.6	4	102	87	1.3	25-60°	VN/TH, FD/CLY, ± MAR/W-R
T.D.	873'									

RL200C
585.5-774

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

BONDAR-CLEGG

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

JUL 29 1991

REPORT: R91-11337.4 (PARTIAL)

REFERENCE INFO: RL200C 585.5-774

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

SUBMITTED BY: SCHEIDNER
DATE PRINTED: 24-JUL-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	42	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	8	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
D DRILL CORE	40	2 -150	40	CRUSH,PULVERIZE -150	40
P PREPARED PULP	2	4 AS REC'D	2	AS RECEIVED, NO SP	2

NOTES: # Indicates ERRATIC RESULTS

REMARKS: #ERRATIC RESULTS

REPORT COPIES TO: MR. TIM KUHN
MR. TIM KUHN
MS. KRISTIN KENNER

INVOICE TO: MR. TIM KUHN

Richey L Dunton

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 24-JUL-91

REPORT: R91-11337.4 (PARTIAL)

PROJECT: ROSEBUD PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
D2 RL20OC 585.5 591.5		<0.002			D2 RL20OC 769 774		<0.002		
D2 RL20AC 591.5 593.5		<0.002			P4 BA 14		<0.002		
D2 RL20OC 593.5 597.5		<0.002							
D2 RL20AC 597.5 600.5		<0.002							
D2 RL20OC 600.5 604.5		0.027							
D2 RL20AC 604.5 609		0.004							
D2 RL20OC 609 613		0.170							
D2 RL20AC 613 617		0.241	0.196						
D2 RL20OC 617 621		0.057							
D2 RL20AC 621 626		0.065							
D2 RL20OC 626 631.5		0.021							
D2 RL20AC 631.5 637		<0.002							
D2 RL20OC 637 342		<0.002							
D2 RL20AC 642 647		<0.002							
D2 RL20OC 647 652		0.006							
D2 RL20AC 652 655.5		0.009							
D2 RL20OC 655.5 661		<0.002							
D2 RL20AC 661 664		<0.002	<0.002						
D2 RL20OC 664 668.5		<0.002							
D2 RL20AC 668.5 673		0.012							
P4 BA 13		0.032							
D2 RL20AC 673 678		0.010							
D2 RL20OC 678 683		0.054							
D2 RL20AC 683 688		0.016#	0.041						
D2 RL20OC 688 693		0.002	0.003						
D2 RL20AC 693 698		<0.002							
D2 RL20OC 698 703		0.060							
D2 RL20AC 703 707.5		0.030	0.030						
D2 RL20OC 707.5 712.5		0.039							
D2 RL20AC 712.5 717.5		0.006#	<0.002	0.012					
D2 RL20OC 717.5 722.5		0.003							
D2 RL20AC 722.5 727.5		0.003							
D2 RL20OC 727.5 733		0.018	0.016						
D2 RL20AC 733 737		0.012							
D2 RL20OC 737 743		<0.002							
D2 RL20AC 743 749		0.002							
D2 RL20OC 749 754.5		0.009							
D2 RL20AC 754.5 760		<0.002							
D2 RL20OC 760 764		<0.002							
D2 RL20AC 764 769		<0.002	0.003						

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11337.4 (PARTIAL)

DATE PRINTED: 24-JUL-91

PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT
ANALYTICAL BLANK		<0.002	-	-					
Number of Analyses		1	-	-					
Mean Value		0.0010	-	-					
Standard Deviation		-	-	-					
Accepted Value		0.002	-	-					
AU ASSAY STD		0.011	-	-					
Number of Analyses		1	-	-					
Mean Value		0.0110	-	-					
Standard Deviation		-	-	-					
Accepted Value		0.015	-	-					
Number of Analyses		-	-	-					
Mean Value		-	-	-					
Standard Deviation		-	-	-					
Accepted Value		-	-	-					
Number of Analyses		-	-	-					
Mean Value		-	-	-					
Standard Deviation		-	-	-					
Accepted Value		-	-	-					

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DATE PRINTED: 24-JUL-91

REPORT: R91-11337.4 (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
RL200C 613 617		0.241	0.196						
Duplicate		0.196							
RL200C 661 664		<0.002	<0.002						
Duplicate		<0.002							
RL200C 683 688		0.016#	0.041						
Prep Duplicate		0.009#	0.021						
RL200C 712.5 717.5		0.006#	<0.002	0.012					
Duplicate		<0.002							
Prep Duplicate		0.009#	0.021						
Duplicate		<0.002							

RL200C
774-883

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

JUL 22 1991

REPORT: R91-11339.4 (PARTIAL)

REFERENCE INFO: RL2000C 774-873

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

SUBMITTED BY: WAICK
DATE PRINTED: 19 JUL 91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	21	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	3	0.002 OPT		Fire Assay

RESULTS TO FOLLOW FOR: AG DUP AU Dup Ag

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	20	2 -150	20	CRUSH,PULVERIZE -150	20
P PREPARED PULP	1	4 AS REC'D	1	AS RECEIVED, NO SP	1

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MS. KRISTIN KLINNER

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Geochemical Lab Report

REPORT: R91-11339.4 (PARTIAL)

DATE PRINTED: 19-JUN-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT
D2 RL200C 774 779		0.003	
D2 RL200C 779 784		<0.002	
D2 RL200C 784 789		<0.002	
D2 RL200C 789 794		<0.002	
D2 RL200C 794 799		<0.002	
D2 RL200C 799 804		<0.002	
D2 RL200C 804 809		0.002	
D2 RL200C 809 814		<0.002	
D2 RL200C 814 818		0.002	
D2 RL200C 818 823		<0.002	<0.002
D2 RL200C 823 828		<0.002	
D2 RL200C 828 833		<0.002	
D2 RL200C 833 838		0.002	
D2 RL200C 838 842		<0.002	
D2 RL200C 842 847.5		<0.002	<0.002
D2 RL200C 847.5 852.5		<0.002	
D2 RL200C 852.5 858		<0.002	
D2 RL200C 858 863		<0.002	
D2 RL200C 863 868		0.026	
D2 RL200C 868 873		0.010	0.010
P4 DA 16		0.020	

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Geochemical Lab Report

REPORT: R91-11339.4 (PARTIAL)

DATE PRINTED: 19-JUL-91
PROJECT: ROSEBUD PAGE 2

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT
ANALYTICAL BLANK		<0.002	-
Number of Analyses		1	-
Mean Value		0.0010	-
Standard Deviation		-	-
Accepted Value		0.002	-
AU PULP STD		0.214	-
Number of Analyses		1	-
Mean Value		0.2140	-
Standard Deviation		-	-
Accepted Value		0.184	-
Number of Analyses		-	-
Mean Value		-	-
Standard Deviation		-	-
Accepted Value		-	-
Number of Analyses		-	-
Mean Value		-	-
Standard Deviation		-	-
Accepted Value		-	-

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Geochemical Lab Report

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DATE PRINTED: 19-JUL-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT
RL200C 818 823		<0.002	<0.002
Duplicate		<0.002	
RL200C 842 847.5		<0.002	<0.002
Prep Duplicate		<0.002	
RL200C 868 873		0.010	0.010
Duplicate		0.010	

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11263.4 (COMPLETE)

REFERENCE INFO: RL 2000, D-325

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

SUBMITTED BY: STOHBERI
DATE PRINTED: 24-JUL-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	68	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	14	0.002 OPT		Fire Assay
3	AU Dup Gold Duplicate	1	0.002 OPT		Fire Assay
4	Ag Silver	68	0.02 OPT	MULT ACID TOT DIG	Atomic Absorption
5	AG DUP AG DUPLICATE	4	0.02 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
Z OTHER DRILL TYPES	65	2 -150	65	CRUSH,PULVERIZE -150	65
P PREPARED PULP	3	4 AS REC'D	3	AS RECEIVED, NO SP	3

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R91-11263.4 (COMPLETE)

DATE PRINTED: 24-JUL-91
PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG 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		0.150	-	-	-	-
GEO TRACE STD1(1989)		-	-	-	1.12	-
GEO TRACE STD1(1989)		-	-	-	1.17	-
Number of Analyses:		-	-	-	2	-
Mean Value		-	-	-	1.148	-
Standard Deviation		-	-	-	0.0338	-
Accepted Value		-	-	-	1.05	-
AG ASSAY		-	-	-	3.06	-
AG ASSAY		-	-	-	3.09	-
Number of Analyses:		-	-	-	2	-
Mean Value		-	-	-	3.077	-
Standard Deviation		-	-	-	0.0170	-
Accepted Value		-	-	-	3.03	-
AU ASSAY STD		0.014	-	-	-	-
Number of Analyses:		1	-	-	-	-
Mean Value		0.0140	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.015	-	-	-	-

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11339.4 (COMPLETE)

REFERENCE INFO: RL2000C 774-873

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

SUBMITTED BY: WALCK
DATE PRINTED: 22-JUL-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	21	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	3	0.002 OPT		Fire Assay
3	Ag Silver	21	0.02 OPT	MULT ACID TOT DIG	Atomic Absorption
4	AG DUP AG DUPLICATE	2	0.02 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	20	2 -150	20	CRUSH,PULVERIZE -150	20
P PREPARED PULP	1	4 AS REC'D	1	AS RECEIVED, NO SP	1

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Rickey L Davis

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Geochemical Lab Report

REPORT: R91-11339.4 (COMPLETE)

DATE PRINTED: 22-JUL-91
PROJECT: ROSEBUD PAGE 2

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	Ag OPT	AG DUP OPT
ANALYTICAL BLANK		<0.002	-	-	-
Number of Analyses		1	-	-	-
Mean Value		0.0010	-	-	-
Standard Deviation		-	-	-	-
Accepted Value		0.002	-	-	-
AU PULP STD		0.214	-	-	-
Number of Analyses		1	-	-	-
Mean Value		0.2140	-	-	-
Standard Deviation		-	-	-	-
Accepted Value		0.184	-	-	-
GEO TRACE STD1(1989)		-	-	0.97	-
Number of Analyses		-	-	1	-
Mean Value		-	-	0.966	-
Standard Deviation		-	-	-	-
Accepted Value		-	-	1.05	-
^ ASSAY		-	-	3.06	-
Number of Analyses		-	-	1	-
Mean Value		-	-	3.056	-
Standard Deviation		-	-	-	-
Accepted Value		-	-	3.03	-

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R91-11337.4 (COMPLETE)

REFERENCE INFO: RL200C 585.5-774

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

SUBMITTED BY: SCHEIBNER
DATE PRINTED: 29-JUL-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	42	0.002 OPT		Fire Assay
2	Au DUP Gold Duplicate	8	0.002 OPT		Fire Assay
3	AU Dup Gold Duplicate	1	0.002 OPT		Fire Assay
4	Ag Silver	42	0.02 OPT	MULT ACID TOT DIG	Atomic Absorption
5	AG DUP AG DUPLICATE	3	0.02 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	40	2 -150	40	CRUSH,PULVERIZE -150	40
P PREPARED PULP	2	4 AS REC'D	2	AS RECEIVED, NO SP	2

NOTES: # indicates ERRATIC RESULTS

REMARKS: #ERRATIC RESULTS

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Geochemical Lab Report

REPORT: R91-11337.4 (COMPLETE)

DATE PRINTED: 29-JUL-91

PROJECT: ROSEBUD PAGE 3

STANDARD NAME	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
ANALYTICAL BLANK		<0.002	-	-	-	-
Number of Analyses		1	-	-	-	-
Mean Value		0.0010	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.002	-	-	-	-
AU ASSAY STD		0.011	-	-	-	-
Number of Analyses		1	-	-	-	-
Mean Value		0.010	-	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		0.015	-	-	-	-
GEO TRACE STD1(1989)		-	-	-	0.96	-
GEO TRACE STD1(1989)		-	-	-	0.92	-
Number of Analyses		-	-	-	2	-
Mean Value		-	-	-	0.938	-
Standard Deviation		-	-	-	0.0258	-
Accepted Value		-	-	-	1.05	-
AG ASSAY		-	-	-	3.02	-
Number of Analyses		-	-	-	1	-
Mean Value		-	-	-	3.021	-
Standard Deviation		-	-	-	-	-
Accepted Value		-	-	-	3.03	-

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Geochemical Lab Report

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DATE PRINTED: 29-JUL-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
D2 RL2UUC 769 774		<U.UUU2			0.04	
P4 BA 14		<U.UUU2			<U.U2	

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 22-JUL-91

REPORT: R91-11339.4 (COMPLETE)

PROJECT: ROSEBUD PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	Ag OPT	AG DUP OPT
D2 RL20DC 774 779		0.003		<0.02	
D2 RL20DC 779 784		<0.002		<0.02	
D2 RL20DC 784 789		<0.002		<0.02	
D2 RL20DC 789 794		<0.002		<0.02	
D2 RL20DC 794 799		<0.002		<0.02	
D2 RL20DC 799 804		<0.002		<0.02	
D2 RL20DC 804 809		0.002		0.03	
D2 RL20DC 809 814		<0.002		0.03	
D2 RL20DC 814 818		0.002		0.06	
D2 RL20DC 818 823		<0.002	<0.002	0.05	0.03
D2 RL20DC 823 828		<0.002		0.03	
D2 RL20DC 828 833		<0.002		<0.02	
D2 RL20DC 833 838		0.002		<0.02	
D2 RL20DC 838 842		<0.002		<0.02	
D2 RL20DC 842 847.5		<0.002	<0.002	<0.02	<0.02
RL20DC 847.5 852.5		<0.002		<0.02	
D2 RL20DC 852.5 858		<0.002		0.03	
D2 RL20DC 858 863		<0.002		<0.02	
D2 RL20DC 863 868		0.026		0.03	
D2 RL20DC 868 873		0.010	0.010	0.08	
P4 BA 16		0.020		0.19	

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11263.4 (COMPLETE)

DATE PRINTED: 24-JUL-91

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
Z2 RL200 195 200		<0.002			0.07	
P4 BA 72		0.026	0.030		0.23	
Z2 RL200 200 205		0.017	0.017		0.25	
Z2 RL200 205 210		0.009	0.005		0.07	
Z2 RL200 210 215		0.004			0.05	
Z2 RL200 215 220		<0.002			<0.02	
Z2 RL200 220 225		0.003	0.002		0.03	
Z2 RL200 225 230		0.006			0.11	
Z2 RL200 230 235		0.006			0.13	
Z2 RL200 235 240		<0.002			0.03	
Z2 RL200 240 245		<0.002			<0.02	
Z2 RL200 245 250		<0.002			0.04	
Z2 RL200 250 255		<0.002			<0.02	
Z2 RL200 255 260		0.004			<0.02	
Z2 RL200 260 265		0.023	0.022		0.46	
Z2 RL200 265 270		<0.002			<0.02	
Z2 RL200 270 275		<0.002	<0.002		<0.02	
Z2 RL200 275 280		<0.002	<0.002		<0.02	<0.02
Z2 RL200 280 285		<0.002			<0.02	
Z2 RL200 285 290		<0.002			0.05	
Z2 RL200 290 295		<0.002			0.07	
Z2 RL200 295 300		<0.002			<0.02	
P4 BA 73		0.055			0.08	
Z2 RL200 300 305		<0.002			<0.02	
Z2 RL200 305 310		<0.002			<0.02	
Z2 RL200 310 315		0.006			0.03	
Z2 RL200 315 320		0.003			0.04	
Z2 RL200 320 325		<0.002			0.04	

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Geochemical Lab Report

REPORT: R91-11337.4 (COMPLETE)

DATE PRINTED: 29-JUL-91
PROJECT: ROSEBUD PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
D2 RL20DC 585.5 590.5		<0.002			<0.02	
D2 RL20DC 590.5 593.5		<0.002			<0.02	
D2 RL20DC 593.5 597.5		<0.002			0.07	
D2 RL20DC 597.5 600.5		<0.002			0.17	
D2 RL20DC 600.5 604.5		0.027			0.09	
D2 RL20DC 604.5 609		0.004			0.11	
D2 RL20DC 609 613		0.170			0.18	
D2 RL20DC 613 617		0.241	0.196		0.28	0.33
D2 RL20DC 617 621		0.057			0.05	
D2 RL20DC 621 626		0.065			0.16	
D2 RL20DC 626 631.5		0.021			0.04	
D2 RL20DC 631.5 637		<0.002			0.03	
D2 RL20DC 637 342		<0.002			<0.02	
D2 RL20DC 642 647		<0.002			0.02	
D2 RL20DC 647 652		0.006			0.04	
D2 RL20DC 652 655.5		0.009			0.14	
D2 RL20DC 655.5 661		<0.002			0.05	
D2 RL20DC 661 664		<0.002	<0.002		0.04	
D2 RL20DC 664 668.5		<0.002			0.03	
D2 RL20DC 668.5 673		0.012			0.03	
P4 BA 13		0.032			0.27	
D2 RL20DC 673 678		0.010			0.05	
D2 RL20DC 678 683		0.054			0.05	
D2 RL20DC 683 688		0.0164#	0.041		0.06	0.09
D2 RL20DC 688 693		0.002	0.003		0.08	
D2 RL20DC 693 698		<0.002			0.42	0.35
D2 RL20DC 698 703		0.060			0.11	
D2 RL20DC 703 707.5		0.030	0.030		0.14	
D2 RL20DC 707.5 712.5		0.039			0.05	
D2 RL20DC 712.5 717.5		0.0066#	<0.002	0.012	0.06	
D2 RL20DC 717.5 722.5		0.003			0.07	
D2 RL20DC 722.5 727.5		0.003			0.05	
D2 RL20DC 727.5 733		0.018	0.016		0.09	
D2 RL20DC 733 737		0.012			0.11	
D2 RL20DC 737 743		<0.002			0.08	
D2 RL20DC 743 749		0.002			0.20	
D2 RL20DC 749 754.5		0.009			0.03	
D2 RL20DC 754.5 760		<0.002			0.04	
D2 RL20DC 760 764		<0.002			0.04	
D2 RL20DC 764 769		<0.002	0.003		0.03	

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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

DATE PRINTED: 24-JUL-91

REPORT: R91-11263.4 (COMPLETE)

PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
RL200 15 20		<0.002	<0.002	<0.002	<0.02	<0.02
Duplicate		<0.002			<0.02	
Prep Duplicate		<0.002			<0.02	
RL200 65 70		<0.002	<0.002		0.04	
Duplicate		<0.002				
RL200 100 105		<0.002			<0.02	<0.02
Duplicate					<0.02	
RL200 120 125		<0.002			<0.02	
Duplicate		<0.002				
RL200 170 175		0.010	0.007		0.08	
Duplicate		0.007				
RL200 190 195		<0.002			0.05	0.05
Duplicate					0.05	
RL200 220 225		0.003	0.002		0.03	
Duplicate		<0.002				
RL200 270 275		<0.002	<0.002		<0.02	
Duplicate		<0.002				
RL200 275 280		<0.002	<0.002		<0.02	<0.02
Prep Duplicate		<0.002			<0.02	
Duplicate					<0.02	
Prep Duplicate		<0.002			<0.02	
Duplicate		<0.002				

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Geochemical Lab Report

REPORT: R91-11263.4 (COMPLETE)

DATE PRINTED: 24-JUL-91
PROJECT: ROSEBUD PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
Z2 RL200 0 5		<0.002			<0.02	
Z2 RL200 5 10		<0.002			<0.02	
Z2 RL200 10 15		<0.002			<0.02	
Z2 RL200 15 20		<0.002	<0.002	<0.002	<0.02	<0.02
Z2 RL200 20 25		<0.002			<0.02	
Z2 RL200 25 30		<0.002			<0.02	
Z2 RL200 30 35		<0.002			<0.02	
Z2 RL200 35 40		<0.002			<0.02	
Z2 RL200 40 45		<0.002			<0.02	
Z2 RL200 45 50		<0.002			0.04	
Z2 RL200 50 55		0.003			<0.02	
Z2 RL200 55 60		0.004			0.03	
Z2 RL200 60 65		0.008			0.04	
Z2 RL200 65 70		<0.002	<0.002		0.04	
Z2 RL200 70 75		<0.002			0.05	
Z2 RL200 75 80		<0.002			0.04	
Z2 RL200 80 85		<0.002	0.003		0.04	
Z2 RL200 85 90		<0.002			0.04	
Z2 RL200 90 95		<0.002			<0.02	
Z2 RL200 96 100		<0.002			<0.02	
P4 BA 71		0.018			0.10	
Z2 RL200 100 105		<0.002			<0.02	<0.02
Z2 RL200 105 110		<0.002			<0.02	
Z2 RL200 110 115		<0.002			<0.02	
Z2 RL200 115 120		<0.002			<0.02	
Z2 RL200 120 125		<0.002			<0.02	
Z2 RL200 125 130		<0.002	<0.002		0.03	
Z2 RL200 130 135		<0.002	0.003		0.10	
Z2 RL200 135 140		0.003	0.003		0.07	
Z2 RL200 140 145		<0.002			0.06	
Z2 RL200 145 150		<0.002			<0.02	
Z2 RL200 150 155		<0.002			0.03	
Z2 RL200 155 160		<0.002			0.04	
Z2 RL200 160 165		0.004			0.04	
Z2 RL200 165 170		0.005			0.09	
Z2 RL200 170 175		0.010	0.007		0.08	
Z2 RL200 175 180		0.013			0.14	
Z2 RL200 180 185		0.008			0.08	
Z2 RL200 185 190		0.004			0.06	
Z2 RL200 190 195		<0.002			0.05	0.05

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11337.4 (COMPLETE)

DATE PRINTED: 29-JUL-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Au DUP OPT	AU Dup OPT	Ag OPT	AG DUP OPT
RL200C 613 617		0.241	0.196		0.28	0.33
Duplicate		0.196			0.33	
RL200C 661 664		<0.002	<0.002		0.04	
Duplicate		<0.002				
RL200C 683 688		0.016#	0.041		0.06	0.09
Prep Duplicate		0.009#	0.021		0.09	
RL200C 693 698		<0.002			0.42	0.35
Duplicate					0.35	
RL200C 712.5 717.5		0.006#	<0.002	0.012	0.06	
Duplicate		<0.002				
Prep Duplicate		0.009#	0.021		0.09	
Duplicate		<0.002				

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

DATE PRINTED: 22-JUL-91

REPORT: R91-11339.4 (COMPLETE)

PROJECT: ROSEBUD

SAMPLE NUMBER	FIRMENT UNITS	Au OPT	Au DUP OPT	Ag OPT	AG DUP OPT
RL200C 818 823		<0.002	<0.002	0.05	0.03
Duplicate		<0.002		0.03	
RL200C 842 847.5		<0.002	<0.002	<0.02	<0.02
Prep Duplicate		<0.002		<0.02	
RL200C 868 873		0.010	0.010	0.08	
Duplicate		0.010			

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

A9117753

Comments: ATTN: TIM KUHL

CERTIFICATE A9117753

LAC MINERALS U.S.A. INC

Project: ROSEBUD
P.O. # :

Samples submitted to our lab in Sparks, NV.
This report was printed on 12-JUL-91.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	6	Assay ring to approx 150 mesh
294	6	Crush and split (0-10 pounds)

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
998	6	Au oz/T: 1 assay ton	FA-AAS	0.001	20.00

RL 200 c

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 702-356-5395

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RL200c

A9118107

Comments: ATTN: TIM KUHL

CERTIFICATE A9118107

LAC MINERALS U.S.A. INC

Project: ROSEBUD
P.O. # :

Samples submitted to our lab in Sparks, NV.
This report was printed on 19-JUL-91.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	2	Assay ring to approx 150 mesh
294	2	Crush and split (0-10 pounds)

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
998	2	Au oz/T: 1 assay ton	FA-AAS	0.001	20.00

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 702-356-5395

To: LAC MINERALS U.S.A. INC

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89431

Project : ROSEBUD
Comments: ATTN: TIM KUHL

Certificate Date: 12-JUL-91
Invoice No. :19117753
P.O. Number :

CERTIFICATE OF ANALYSIS A9117753

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
RL-200 045-050	208	294	0.001
RL-200 095-100	208	294	< 0.001
RL-200 145-150	208	294	0.001
RL-200 195-200	208	294	0.003
RL-200 245-250	208	294	< 0.001
RL-200 295-300	208	294	0.006

CERTIFICATION: Vaudia M Adams

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 702-356-5395

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Project : ROSEBUD
Comments: ATTN: TIM KUHL

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Certificate Date: 19-JUL-91
Invoice No. :I9118107
P.O. Number :

CERTIFICATE OF ANALYSIS A9118107

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
RL200C 818-823	208	294	0.002
RL200C 868-873	208	294	0.006

CERTIFICATION: Lindsa M Adams

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 702-356-5395

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Project : ROSEBUD
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Page Number :1
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Certificate Date: 19-JUL-91
Invoice No. :I9118106
P.O. Number :

CERTIFICATE OF ANALYSIS A9118106

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
KM3C 902.2-914	208	294	0.004
KM3C 958-963	208	294	0.001
RL200C 621-626	208	294	0.072
RL200C 668.5-673	208	294	0.025
RL200C 769-774	208	294	0.002

LAC RL200C Equinox

CERTIFICATION: Sandra M Adam